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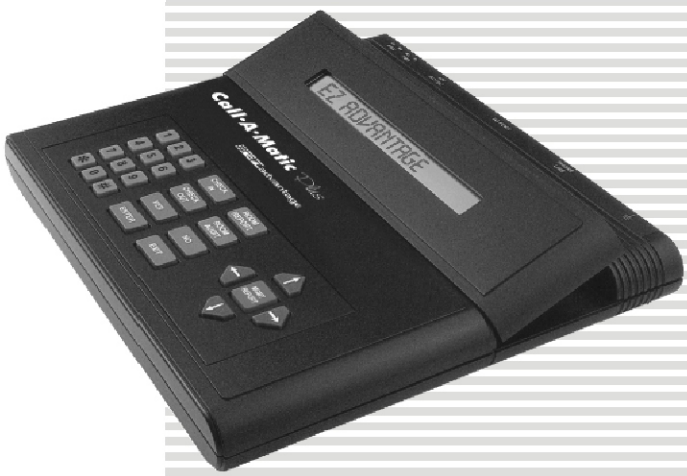
USER MANUAL



EZ Call·A·Matic
Call Accounting System

Call•A•Matic

User Manual

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Call•A•Matic User Manual
Fifth Edition December 2002

EZ Advantage Corp.
221, Broad Street,
Milford,
CT-06460
U.S.A.

For safe and reliable operation, this unit must be grounded properly. Failure to do so, will void warranty

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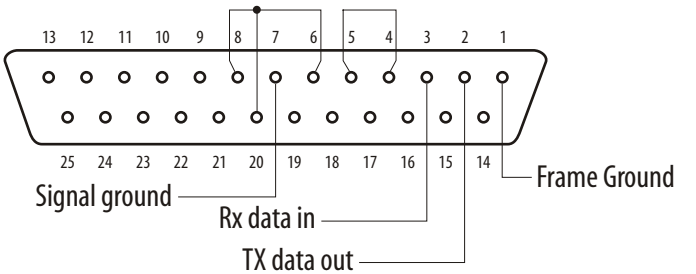
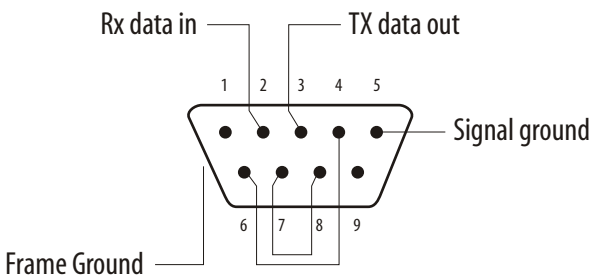
Connection Diagram

Rear panel connector pin-outs

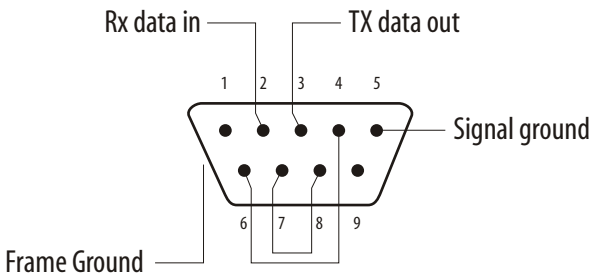
PBX-SMDR Connector Type female DB 25 pin



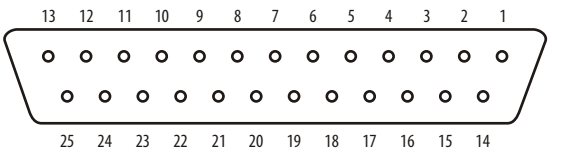
PMS-PC Connector Type male DB 9 pin



SX200 Toll Connector Type male DB 9 pin



Parallel Printer Connector Type female DB 25 pin



Pin 1 - Strobe out
Pin 2 - Data out 1
Pin 3 - Data out 2
Pin 4 - Data out 3
Pin 5 - Data out 4
Pin 6 - Data out 5
Pin 7 - Data out 6
Pin 8 - Data out 7
Pin 9 - Data out 8

Pin 11 - BUSY input
Pin 12 - PE input
Pin 13 - SELECT input
Pin 14 - Printer RESET
Pin 18 to 25 - Signal ground

Pin 10, 14, 15, 17 - No connection

Product Overview

The Call-A-Matic is a stand-alone call accounting system designed specifically for the hospitality industry. The unit is used to collect phone call data from a PBX (phone system) and then process and store the calls that have been made and generate informative and useful reports in a variety of formats.

The Call-A-Matic Plus is housed in a sleek ABS enclosure and the Call-A-Matic PMS Lite is housed in a metal enclosure and is designed for desktop use.

This unit can store upto 2880 calls in its minimum configuration mode and the maximum storage can go up to 15,168 calls. All the essential parameters are stored in a non-volatile memory.

The important features of the unit are given on the next page.

Specifications:

Power Input	9 to 12 volts AC or DC, 500 mA or 5.0 volts DC, 1.5A depending on model
Power Consumption	3 watts max
Battery Back-up	Built in rechargeable type
Size	12" x 12" footprint
Input/Outpot ports	2-Serial Ports, 1-Parallel Printer Port 1-Modem Port-
Minimum Call Storage	2880 Calls
Maximum Storage	15,168 calls
Display	40 x 2 tiltable LCD Screen
Programming and Reports	Through 25 key keyboard
Parameter programming storage	Non-volatile storage in Flash ROM

System Features

1. The Call-A-Matic plugs directly into the serial printer port of a PBX.

2. Fully programmable through a 25 key keypad with messages being displayed on a 40 X 2 line LCD display.

3. User may program the charges separately for each area code, a state, specific numbers or type of numbers, each country, Operator or Information calls etc. May individually mark-up all types of calls.

4. Charging of calls made from an extension may be excluded or included for mark-up under user control.

5. Unit may be programmed to sound an alarm when calls are made to a particular number or from an extension.

6. Password protection to insure against unauthorized deletion of calls records.

7. Two fully user configurable serial ports.

8. Can output the reports onto a serial printer and /or a parallel printer or an IBM PC compatible system (PMS).

9. Call-A-Matic may be configured to interface with a wide variety of PMS.

10. User programmable SMDR format to allow interfacing with any phone system.

11. Informative reports guest check out reports, Audit reports, Room-wise reports, extension-wise reports, and management reports at the touch of a key.

12. Memory protection circuitry insures against data loss. All essential parameters stored in non-volatile memory.

13. This system may be integrated into a Hotel's billing system to provide phone call details, automatically at checkout or shift end etc.

14. Credit limit may be set for each guest, for the total phone call charges, at check in time and the buzzer will sound when that limit is crossed. Alternatively, the Call-A-Matic can instruct the PBX to shut-off the room phone on violation of credit limit.

15. The Call-A-Matic can also restrict the use of each guest's phone for Local, Long-distance or International at check-in. (Toll Control). [for Plus and Limited models only]

16. The Call-A-Matic Plus may be programmed remotely.

Installation Guide

The CALL-A-MATIC System is simple and easy to use. You may start using the system without much of a problem, as soon as it is unpacked.

The Call-A-Matic shipping carton must contain the following items :

The Call-A-Matic Unit
This User Manual
Wall Adapter
Parallel Printer Cable

Select a suitable location for the Call-A-Matic to be placed on the Front Desk of your hotel. A suitable location should have a power socket close by and space for a parallel printer with adequate clearance at the front and rear of the printer for loading and removing the paper in the printer. The place selected should also be easily accessible for any service or maintenance work. Plug in the wall power adapter into the power socket and insert the other end into the power-input jack on the Call-A-Matic. Switch on the power to the unit.

The CALL-A-MATIC system has a Password protection feature and therefore you must use the default password, before you proceed to program the unit.

(a) Power up the unit. The system should give a few beeps and display the start up message on the display.

The normal sequence of the display will be

"MODEM CHECK"

“MODEM O.K.”

“DIAL TONE OK”	or	“NO DIAL TONE”
“PBX CONNECTED”	or	“PBX NOT CONNECTED”

'Installed memory....'

'CALL-A-MATIC....' version no., date of the software version.

Instead of the “MODEM OK” message, if the “MODEM NOT RESPONDING” message appears, it means that there could be a system malfunction. You must inform your dealer or distributor, from whom the unit was purchased,

After this, a screen appears, giving the PBX & printer status and the time, day & date. If the unit is working properly, the time on the LCD will be displayed constantly. (If the date and time are not correct, it may be set correctly later). If the PBX is not connected to the unit, a beep will be sounded immediately on completion of the power on check and then again, once every minute, till the serial cable from the PBX is plugged into the SMDR port.

(b) To get the system working, there are two absolutely essential requirements to be taken care of - the SERIAL PORT CONFIGURATION and the SMDR CONFIGURATION must be done correctly. Read the 'Configure Serial Port' and Configure SMDR' section in the 'Parameter Programming' section before trying to get the system started. All the other programming features may be tried out after doing this basic programming.

This procedure would be a lot easier and faster if you have connected a serial printer to the serial port of the PBX and obtained the call records for a few hours, before trying to connect the CALL-A-MATIC System.

If you have been able to get the serial port parameter details from the PBX manufacturer, then you may proceed to program the serial ports of the CALL-A-MATIC system. If you have obtained some call records from the PBX, it would be helpful in configuring the SMDR format in the system.

(c) Type in the default password and enter the programming mode of the system. If the serial port parameters of the PBX are known and if the PBX is listed in the predefined types under program 103, then you may start using the system straight away.

If one or both of the above are unknown then proceed as follows.

(d) Read the section 'Raw Data pass through' in the programming section and set the system to pass through the raw data read from the serial port to the parallel printer. Program 106 (page 13).

Now, set the serial port parameters for the PBX - you will have to try different combinations one by one - and make a call from the PBX, so that the call record is put out by the PBX on its serial port.

The most common baud rates are 300, 1200, 2400 and 9600 and usually 8-bit transmission mode is used. So, start with these combinations and after every call is made, check whether the printer prints out the call or not. You will have to continue with this trial and error method till the correct combination is found.

(e) Once the serial port for the PBX interface is properly configured, print the Ruler lines on the printer through Program 103 and then collect a few call records. Now, find out the starting column numbers and field lengths for each field in the raw call record as received from the PBX. Some samples records are given below: -

Date	Time	Duration	Ext		Number	TRK	AC.#
05/10	1.08 P	00:00:06	139	9	3892067	T092	7099
05/10	1.09 P	00:00:44	263	9	1609386000	T094	7099
05/10	1.09 P	00:01:12	263	9	01191272481370	T098	7099

Read the 'SMDR configuration' section and proceed to program the SMDR details accordingly. After this is done, the details of the calls will start appearing on the LCD to indicate the proper functioning of the unit in its very basic mode. By default, the system is programmed for MITEL PBX with 1200 baud, 8 data, 1 stop, and no parity.

The next section describes each of the available programs in detail.

Parameter Programming

To enter into the programming mode, press [*] key first and then as prompted by the message on the display press [ENTER] To abort, press [EXIT]

When you press [ENTER] the message "Enter Password:" is displayed. Enter your password here to gain access to the programming mode. If an invalid password is entered, the system prompts the message ' illegal password ' and returns to normal mode of operation.

Users of 4 digit passwords are not allowed access to parameter programming. Once a valid password is entered, the message "Enter Program No.:" is displayed.

Once a valid program number has been entered, the message prompts for that program are displayed. A '**+**' sign in the top right hand corner means help is available for this program. Press the BLUE key to view the Help messages. If an invalid program number is entered, the error message *"No such program number"* is displayed on the screen. Press any key to erase the message. The programs available are:

Program No.	Program description
101 - Passwords	(to change/delete/set new passwords)
102 Configure serial ports	(to configure the system's serial ports)
103 - Configures SMDR	(to configure the SMDR of the PBX)
104 - Set time,date	(to set the real time clock)
105 - Print on fly	(to set print-on-fly options)
106 - Raw data pass through	(to check the printer/serial port)
107 - Set grace time	(to set grace time for call charging)
108 - Non call record options	(to set options for non-call records)
109 - Auto report scheduling	(to set auto night report timings)
110 - Do not fly print for extensions	(to exclude some extensions from p-fly)
111 - Do not count call on extension	(to exclude certain extensions)
112 - Do not count calls on bands	(to exclude certain bands)
113 - Evening Rates	(set discounted evening rate timings)
114 - Weekend Rates	(set discounted weekend rate timings)
115 - Local Calling	(set Local / local LD dialing options)
116 Toll Control	(dial out required through test line)
117 - Default Credit Limit	(set default credit limit)
118 Keypad options	(keypad time out,typing rate)
119 - Administrative extensions	(No toll control/surcharge extensions)
120 - Do not print on fly bands	(exclude some bands for printing on fly)
121 Extension pairing	(pair two extensions in a room)
122 - Beeper control	(Beeper on/off)
123 - Page control options	(reports on top-of-page etc.)
125 - PMS formats	(select PMS type)
126 - New AREA CODE additions	(Add new area codes)
127 Property name	(enter name of property)
128 Caller Id strings	(digits to strip for caller-id disable)
129 Valid extension list	(for Call-a-Matic Limited only)
130 PMS test program	(to send dummy PMS records to PMS)

Charge Setting Programs

The program numbers from 201 to 630 are all charge-setting programs. These program numbers are also referred to as band numbers in all reports.

201 - Local calls	
202 - Local long distance	
203 - 1+ 10 digit calls (Local)	(Local, enter area codes)
204 - Common charges for interstate calls	(1+10 digit LD calls)
205 - Common charges for all INTL Calls	011 calls
206 - Info calls	1411,411,5551212, 1555 1212
207 - Other 1 + 10 digits not listed elsewhere	
208 - Undefined 011 international calls	
209 - 1-XXX info calls	1 XXX 555 1212
210 - 1-700 calls	
211 - 1-800 calls	1-800, 1-888, 1-877 calls
212 - 1-900 calls	
213 - 976 calls	
214 - 710 calls	
215 - 0+ calls	
216 - International credit calls	01 XXX XXX XXXXXXX

301 - 362 State lists with area codes for USA & Canada
401 - 421 prefixed state groups.
500 - 530 prefixed international country code group
601 - 608 user programmable bands for area codes
609 - 616 user programmable bands for exchange
617 - 621 user programmable bands for International codes
622 - 625 user programmable bands for particular #'s
626 - 630 user programmable bands for alarm #'s, area codes and exchanges.

Supervisory Programs

800 - Parameter dump
999 - Clear all memory and load default parameters
998 - Load all default charges
996 - Clear property name
995 - Clear Exception report strings
992 - Delete all entries for 110-112,115,119,120,121,126,128,6xx programs
991 - Delete all calls and room numbers
990 - Delete all calls and room numbers, clear user defined entries, load default charges, load default SMDR, serial port parameters, grace periods
980 - Save program parameters in non-volatile memory
970 - Restore program parameters from non-volatile memory

101 - Password options

The passwords may be of 4, 5, or 6 digits. There is a single 6-digit password programmed into the hardware and cannot be changed. This password would be used by the maintenance personnel and is known only to the manufacturer's representatives.

There is 1 default password of 5 digits, which is programmed into the unit when shipped from factory. A maximum of 2 passwords of 5 digits and 3 passwords of 4 digits may be programmed in the unit. If you try to enter more passwords than the maximum permitted, an error message will be displayed.

The 5 digit passwords allow access to all programs. Access to programming mode is denied for 4 digit password users.

Under this program, the user has the following options:

1. Change existing password
2. Define new password
3. Delete existing password
4. View existing password (only with 6 digit master password)

The 5 digit and 4 digit passwords may be changed by the user under this program. The system prompts the message -

Current Password :(enter the password that needs to be changed)

New Password :(enter the new password)

You may delete only one password at a time. The unit will not allow you to delete the last remaining 5-digit password.

102 - Configure Serial Ports

The two serial ports of the system may be configured under this program.

When you go into this program, the unit prompts with the message:

"Configure PBX/SMDR port ? (yes/no) :"

If you press the YES key, the unit will show the current settings for the SMDR serial port.

The default values shown would be **" 1200, 8 bits, No-parity, 1-stop"**

Use the left and right arrow keys to move to the next or previous parameter on the line. Pressing the NO key will take you through the available options for the current parameter. To select a different baud rate, position the blinking cursor on the baud rate, press the NO key repeatedly till the desired baud rate value is displayed on the screen and then press the YES key. Repeat this procedure till all the parameters are properly selected as desired. Pressing the ENTER key anywhere will take you to the next screen. EXIT key will take you back to the main menu of **"Enter program Number"**

Repeat the above procedure for the other serial port when the unit prompts with the message:

"Configure PMS/PC port ? (yes/no) :"

At this point, the NO key will take you back to the main menu. The YES key will show the currently programmed values for the second serial port.

Note: The PMS/PC port configuration screen will not pop up if the PBX type selected under program # 116 is SX200 MITEL LITE or ATLAS. The serial port parameters, in this case, must be defined under program # 116.

The available options for all the individual parameters are:

Baud Rate	Data bits	Stop bit	Parity
19200	7 data bits	1 stop bits	No parity
9600	8 data bits	2 data bits	Odd parity
4800			Even parity
2400			
1200			
600			
300			

103 - Configure SMDR

The Serial Module Data Record received from the PBX must be decoded properly by the system and for this, it is essential to define the SMDR of the PBX correctly.

The SMDR definition for the following PBXs are predefined in the unit:

MITEL
JISTEL
CARDINAL
COMDIAL
TOSHIBA
FUJITSU
AT&T
NORTEL
NEC
ATLAS
TRANSTEL

USER DEFINED

If MITEL PBX is selected, one more option is prompted.

MITEL Answer detection enabled ? YES/NO

In some locations, the TELCO provides a positive identification of a phone call having actually been put through. If such a facility is available and the MITEL PBX is appropriately programmed, it provides this information in the SMDR as an ANSWER DETECTION character. In such cases, the call duration will always be the actual duration for which the call was made. Hence, grace period method of charging may be avoided for these calls.

However, even if the Answer Detection is enabled, the grace period method is applied for all calls, which do not have the "Answer detection" character ion the SMDR. This is done, because, typically the Answer detection is available only on T1 lines which are normally used for Long distance and International calls only. Hence, Toll free and Local calls etc. do not have Answer Detection facility.

When the USER DEFINED option is selected, you have the option of **enabling** or **disabling** the **RULER LINE** in the next screen. If the ruler line is enabled, the unit prints a ruler line on the printer and the incoming call record is printed below it. If the RULER LINE is enabled, the unit will not process the call, but will print it out directly onto the printer as received from the PBX, even while the user is still in the programming mode.

Hence, if the SMDR pattern is not known or does not fit the pre-defined PBX types, enable the ruler line and make a few calls. From the print out, determine the starting columns and field lengths of the different fields in the call record and enter them in the user defined SMDR pattern.

If USER DEFINED option is selected, the details must be entered (starting column and field lengths). Once the User Defined type has been defined, the entered values will be prompted the next time. If any of the above fields are to be ignored, enter 0000 for that field. The fields that need to be defined are:

DATE	
TIME	
DURATION	
EXTENSION	
CALLED NO	
TRUNK ID	
AC.CODE	
DURATION TYPE	**hh:mm / hh:mm:ss**
	mmm.m
	mmmss
	sssss
	Hmmts
	Start / End time

For each of the above fields, the column numbers and field lengths of all the fields of the call record are to be entered. The System prompts the field name and expects a 4-digit number, giving the starting column number of the field in the call record (a 2-digit number), followed by the field length (a 2 digit number) e.g. 2805 etc.

The call records stored in the memory after processing the incoming records have a predefined format. The length for each of the fields in the processed record has a maximum limit and hence, even if you define a larger field length in the SMDR format, it would be truncated. However, if you define a smaller field length, only that many digits would be taken.

For example, the 'Extn' field has a 4 digit maximum limit and hence, even if you define a 5-digit extension field, only four digits would be taken starting from the column number specified by you. However, if you define a smaller field length, only that many digits would be taken.

The DURATION, EXTENSION and CALLED NUMBER fields in the incoming SMDR are validated for correctness in all incoming call records. If any of these fields contain invalid characters, the record would be treated as a NON-CALL record.

The DATE and TIME fields are also validated. However, if either one or both of them are invalid, the current date and time from the real-time clock in the unit is automatically inserted into the call record.

No validation is done for the TRUNK and AC.CODE fields.

Once the USER DEFINED SMDR is defined fully, you have the option of disabling the RULER LINE printing. If this is not disabled, the unit will continue to be in a raw data pass through mode, where it will print the ruler line and then the call record as received from the PBX.

While processing the calls, the Call-A-Matic automatically takes care of the following :

ALTERNATE CARRIER CALLS 10xxx or 101xxxx
RIGHT-JUSTIFIED CALLED NUMBERS
DASHES SEPARATING THE AREACODE AND EXCHANGES

If the called number has been dialed with an alternate carrier access code prefixed to the actual called number, the Call-A-Matic automatically identifies and strips off the excess digits. However, in the reports and the print on fly records, such calls can be easily detected since a "**+**" is prefixed in front of the called number field of the output record.

If the called number is right justified in the incoming call record, the Call-A-Matic automatically adjusts the digits properly. Hence, while defining the SMDR fields, the starting column must be defined in such a way that the leading digits of even the longest called number including the Alternate carrier access digits - are not missed out.

104 - Set Date and Time

The time and date of the 'real time clock' in the system may be set as per the actual time. Use the right and left arrow keys to go from one field to the next or previous one. Use the NO key to scroll through the month and day-of-week. The date and time has to be entered in by using the digit keys. The YES key would also take you to the next field. Enter will take you to the next screen.

The time received from the PBX in the call record is used for checking whether the call was during Evening or Weekend rate period.

105 - Print On Fly

As soon as a call record is received, it is validated & formatted as per the standard format of the system, the type of call is identified, the charges calculated and stored in memory. If this formatted record is to be immediately printed out every time after the record is received, then enable the 'print on fly' option. By default, this option is enabled. The options available are -

Print-on-fly without header **(default)**

Print-on-fly with Header

Print-on-fly Disabled

The NO key and the left / right arrow keys toggle through the available options. Press YES or ENTER to go to the next screen.

Store no charge calls **ENABLED** (Default) **DISABLED**

Additional blank lines between print-on-fly records? (0 to 9)

If you set 0 as the number of additional lines between print on fly records, then each of these records would be printed on consecutive lines.

Printer set up: Options available are

PARALLEL PRINTER ONLY **(default)**

SERIAL PRINTER ONLY

SERIAL = PFLY ONLY, P'LLEL = ALL DATA

SERIAL = PFLY+NON CALLS, P'LLEL=REPORTS

ALL DATA ON SERIAL & P'LLEL PRINTERS

The serial printer is connected to the port marked SERIAL/PMS PC at the back of the unit. If both serial and parallel printers are being used and you want to separate type of information to appear on the two printers, choose the third or the fourth option given above. The fifth option is usually used for troubleshooting.

If the PMS option is enabled, this `printer set up' screen will not pop-up.

106 - Raw Data Pass Thru

This option is more of a trouble shooting aid and normally needs to be used at installation time. When this option is enabled, all the data received from the serial port connected to the PBX will be rerouted to the serial / parallel printer port without any changes. However, if the serial port receiving data from the PBX itself is not configured properly to match the PBX parameters, there will be an error from the serial port and no data will be output onto the printer port.

Raw data pass through from PBX to PRINTER - Disable or Enable

When finished with this option you must be sure to disable this option or calls will not be processed. However, this option is automatically disabled at midnight.

Default = disabled

If the raw data received from the PBX is being sent out on the second serial port, care must be taken to set the output baud rate higher than the incoming baud rate. Or, if the output is being directed to the parallel printer, disable the serial printer in the Printer setup. Failure to do so will result in errors or the unit will reset.

107 - Grace Period

Most of the PBXs cannot detect whether a call was actually completed or not or whether the called number was busy or there was no answer etc., since the call-through signal is not available from the CO.

Hence, if a call was made to a number from which there was no reply or was engaged - but the caller's handset was off the hook for 1 minute, the call record would indicate that the call duration was 1 minute, even though the call was never put through or answered.

In such cases, a grace period may be set for different types of calls. If a call record is received with duration less than the grace period for that type of call, it would not be charged. However, if the call duration is greater than the grace period set in the unit, then the entire duration of the call - which includes the dialing time and waiting to connect time - is also charged for. Some PBXs may already have a grace period setting. (Consult the PBX manual for more details).

> **Note:** The grace period type of call validation is only an approximation method. Hence, there will always be some instances where a call that was never put through will be charged for and some calls that were put through would not be charged for. **If "Answer Detection" is enabled in Program #103, the grace period method of charging will be applied to only those calls that DO NOT have an answer detection character in the call record.**

"LOCAL CALLS	**enter period in seconds:"**	**45 seconds**
"LONG DISTANCE CALLS	**enter period in seconds:"**	**45**
"INFORMATION CALLS	**enter period in seconds:"**	**10**
"INTERNATIONAL CALLS	**enter period in seconds:"**	**55**
"STORE GRACE CALLS? YES / NO :"		**Default = no**

If the calls, which are within the grace period and hence not charged, are to be stored, select YES. In these calls, a ✱ appears in the position of the decimal point to indicate that it is a call within the grace period.

108 - Print Non Call Record

A non-call record is any invalid record received from the PBX. The record could be invalid because it contains invalid characters in the Duration or Extension or Called number fields or because it is some message or title line output by the PBX or because of some malfunction.

The two available options **Print non-call record (Default)**
Do not print non-call record

STORE WAKE UP CALLS

This option is prompted only if MITEL PBX has been selected under program no. 103.

The two available options **Do not store Wake up calls (Default)**
Store Wake up calls

The Wake up calls are stored in a separate area of memory, which can hold between 200 to 300 such records. If this area becomes full, the top 100 records are automatically purged to make way for fresh records.

109 - Auto Report Scheduling

The AUTO NIGHT AUDIT timings and options may be set under this program. If the auto-night-audit report is enabled, the time at which this program is to be invoked must be defined. By default the report is disabled.

To print automatically, first ENABLE the report generation, set the time at which the report is to be printed out and then, set the report options where, you have the option to ***purge checked-out calls and admin calls*** or ***print only*** for this AUTO NIGHT AUDIT report.

If the **"purge calls…"** option is selected, the room-wise Audit report is printed out and then the PROFIT & LOSS report is printed out. The deleted Checked out calls & Checked out summary records for the Checked out rooms are purged from memory and then the Admin Report is printed out & Admin calls deleted.

If the Auto report has already been invoked once, it will run next, at the same time on the next day. However, if you re-enter a new time under this program, the Auto report would be re-invoked once again at the new time, even if the new time falls within the same day. If the new time were already past the current time, the report would be invoked as soon you exit from the programming mode.

110 - DO NOT PRINT ON FLY for following extensions

A list of extensions may be entered under this program and for all calls made from these extensions the calls will not be printed - on fly. However, the calls would appear on the screen and be stored normally.

When you run this program the following screen pops up:

```
110 — DO NOT PFLY EXTNS:    # entries  = 0000
View    Add    Delete       Search
```

The cursor will be flashing on the `V' of View option. The right arrow key and the NO key take the cursor right, whereas the left arrow key moves the cursor left. Select the desired option by using one of these keys and press ENTER or YES key.

*If there are no entries, the **View**, **Delete** and **Search** options will not work. The unit will give a short beep to remind you that there are no entries to View or Delete or Search.*

Select the **"A**dd**"** option and after the second line of the display is cleared, the **"Add :"** prompt is displayed. Now, enter the Don't-print-on-fly extensions, one by one. The extension lengths may be of 2 or 3 or 4 digits. Hence, if you want to add a 2 or 3 digit extension, press "Enter" key to accept

the input. If a 4-digit extension is entered, the unit will automatically accept this input and scroll the last entered extension and the others already displayed on the second line, to the right.

Every time an extension is added, the # of entries count at the right hand corner goes up by one. Hence, it is easy to keep track of the total number of entries already made under this program. If you try to add an extension that already exists, an error message will be prompted.

Press EXIT key to terminate the "Add" option. Now, the **V**iew-**A**dd-**D**elete-**S**earch toolbar will be displayed again.

Once a few entries are entered, the other options may be tried out. Select the **"View"** option by pressing the YES or ENTER key when the cursor is blinking on the `**V**iew' option. Now, all the existing entries will be displayed on the second line. If there are more entries than are possible to show on one line, use the left and right arrow keys to scroll back and ahead in the list of entries. Press the EXIT key to return to the main toolbar.

The **"D**elete**"** option brings up the **"Delete:"** display on the second line and also the prompt **"CHECK-OUT key = Delete ALL"** message.

At this point, if you press the CHECK OUT key, another screen pops asking you to confirm by displaying **"DELETE ALL ENTRIES ? (Yes/Enter or No)"**. If you press the NO key, the entries will not be deleted. If you press the YES or ENTER key, all the existing entries will be deleted.

If you pressed any key other than the CHECK OUT key, the "DELETE ALL…" message will be cleared and if you pressed a digit, it would appear on the second line. Any other key would result in a warning beep.

If the specific extension does not exist in the current list, the warning beep would sound and the unit will return to the "Delete:" screen. Press EXIT to return to the main toolbar.

The **"S**earch**"** option would bring up the **"Search for:"** message and when you enter an extension, it would be looked up for a match in the current entries. If a match is found, the message **"Exists"** is prompted. Otherwise, the message **"Does not exist"** is displayed. Press any key to clear the result message and another search may be made. Press EXIT key to return to the main toolbar.

All the extensions entered here are subject to the "Pairing extension" check. Refer to "Program 121" for the further details.

The following programs use the above format to "View-Add-Delete-Search" the entries:

Program #	Description	Bytes/entry
110	Don't print on fly extension	4
111	Don't count extensions	4
112	Don't count calls to bands	3
115	Local exchanges	3
115	10 digit local area code + exch.	4
115	1+10 local area code + exch.	4
115	Home area codes	3
116	PBX port-extension map	4
119	Administrative extensions	4
120	Don't print on fly bands	3
121	Extension pairs	6
126	New area code additions	4
128	Caller ID disable strings	4
601-608,629	User defined area codes	3
609-616,627	User defined exchanges	3
617-621	User defined INTL codes	4
622-626	User defined numbers	7
628	User defined bands	3
630	User defined extensions	4

The number of bytes taken up by each type of entry is given in the above table. All the entries made under all of the above programs are stored together and the total memory area allocated for all these entries is 8192 bytes. Hence, the total number of bytes occupied by these entries will be the sum of all the entries in all the above programs.

For example, 100 local exchanges (100x3=300 bytes), 50 admin. extensions (50x4=200 bytes), 200 10 digit local exchanges (200x4=800) and 300 extension pairs (300x6=1800) will give a total of 3100 bytes (300+200+800+1800) for all the 650 entries.

On an average, the total memory space should be enough for at least 2000 entries of all types put together.

111 - DO NOT COUNT CALLS from these extensions

A list of extensions may be entered under this program and for all calls made from these extensions, the calls will not be counted. All calls made from extensions listed under this program will be totally ignored. They will not appear on the screen or print on the fly and the charges will not be calculated.

The entry is done in the same way as program #110.

112 - DO NOT COUNT CALLS to these bands

A list of band numbers may be entered under this program and all calls made to these bands will not be counted. For e.g. if you want calls made to the '1411' directory assistance or calls to certain numbers to be ignored - then these phone numbers may be programmed under the ' USER DEFINED BAND' for particular numbers and that band number may be entered under this program.

If you want to ignore all local calls, enter `201' under this program.

The entry is done in the same way as program #110. However, under this program, since all band numbers are of 3 digits only, the **A**dd-**D**elete-**S**earch options will proceed to the next step as soon as 3 digits are entered.

113 - Evening Rates

It is possible to apply a discount to all calls made during the evening hours. When you enter this program, the display prompts **"Start time"** and the time is to be entered in the 24-hour format. Once this is completed, press ENTER to go to the next prompt, where the **"End time"** is to be entered. The **"Mark Down by %"** appears next. Enter the percentage by which you would like to mark down all calls.

All calls made between these timings on weekdays (Monday-Thursday) will be discounted. Local calls are not subject to these discounts.

The calls are first charged as per the "first minute" and "additional minute" charges, then marked up and then discounted by the percentage entered under this program. The "surcharge" is added after the discount has been calculated. For Admin calls, there is no markup hence the charges are directly discounted.

For example, a Long Distance call of 5 minutes to CT, with first minute = 00.35 and additional minute = 00.33, surcharge = 01.55, markup = 25%, mark down = 30% would be charged as follows:

For normal extension

= (0.35 + 4 x 0.33) [(100 + 25) / 100] [(100 30) / 100] + 1.55

= $ 3.01

For Admin extension

= (0.35 + 4 x 0.33) [(100 30) / 100]

= $ 1.16

A mark down of 0% would mean that there is no discount.

114 - Weekend Rates

The weekend rates are applicable to all calls made between the **"Start time"** on Friday evening and **"End time"** on Monday. Calls made all day on Saturday and Sunday are subject to the Weekend rate discounts.

The method of entry and the discount calculation is same as for the Evening rates program.

115 - Local/Local Long Distance Dialing Patterns:

This program number is used to configure the system for the type of local and local-long distance calling allowed in your area.

This program presents you with four different options to take care of your different dialing patterns. The 4 options are:

7 digit Long distance	**:**	**Not selected / Selected**
10 digit Local calls	**:**	**Not selected / Selected**
1+10 digit local calls	**:**	**Not selected / Selected**
Home area code	**:**	**Not selected / Selected**

All the above are "**Not selected**" **by default**. Pressing the left or right arrow keys or the NO key, toggles the **Not Selected** and **Selected** options. Press YES or ENTER to take you to the next screen.

7 digit Long distance:

For areas where all local calls are of 7 digits (e.g. 397 3577) and all Local Long Distance calls must be prefixed with a 1 (e.g. 1 487 4566), choose "Not selected" for the 7-digit long distance (default value). No further programming is required under this option.

In some areas, calls of 7 digits, made to other exchanges within the same Area Code, may be 'Local' or 'In state Long distance' calls. For such areas, choose "Selected" and press YES or ENTER.

When **7digit long distance** is selected, the **V**iew-**A**dd-**D**elete-**S**earch menu pops up and the "total numbers of entries" currently in memory are displayed.

The entry is done in the same way as program #110. However, under this program, since all exchanges are of 3 digits only, the **A**dd-**D**elete-**S**earch options will proceed to the next step as soon as 3 digits are entered.

All calls made to exchanges listed under this option will be treated as Local Calls and charged as per Band 201. All calls made to exchanges NOT listed under this band would be charged as per Band 202.

10 digit Local calls:

In some areas, calls to nearby areas are treated as Local calls, but the dialing is 10 digits, using the *Area code + exchange (without the 1 in front).* In such cases, you will need to enter all the *Area code + exchange* combinations, which are to be treated as Local calling numbers.

When **10-digit local calling** is selected, the **V**iew-**A**dd-**D**elete-**S**earch menu pops up and the "total numbers of entries" currently in memory are displayed.

The entry is done in the same way as program #110. However, under this program, since all area code + exchanges are of 6 digits only, the **D**elete and **S**earch options will proceed to the next step as soon as 6 digits are entered.

While **A**dding the entries, since one area code will have many local calling exchanges, the area code is automatically prompted, to reduce the total number of digits that are required to be entered. For example, if the first entry is 203397, as soon as you enter the 6th digit, the entry will be accepted if it does not already exist, the entry will scroll to the right and the area code will be retained after the "Add:" prompt. To enter the next combination within the same area code (in this case 203), just enter the 3 digits of the exchange. If you need to enter a different area code, use the

Left arrow key to erase the current area code and enter all the 6 digits of the new combination.

All calls made to area code + exchanges listed under this option will be treated as Local Calls and charged as per Band 203. All calls made to area code + exchanges NOT listed under this band but where the Area code matches an entry in the Home Area Code list would be treated as Local Long distance calls and are subject to charges for band 202. If the Area code matches an entry in the Area code list, the call will be treated as a Long Distance call.

1+10 digit Local calls:

In some areas, where the 10 digit local calling is applicable, all such numbers may be dialed even with the 1 in front, like a normal 1+10 digit long distance number.

In such cases, select this option and proceed to enter all the area code + exchange combinations as in the case above.

As in the case above, all calls made to area code + exchanges listed under this option will be treated as Local Calls and charged as per Band 203. However, all calls made to area code + exchanges NOT listed under this band would be treated as normal Long distance calls and are subject to charges for that area code.

Home Area code:

For areas where in state Long Distance Calls are made by dialing Area Codes and exchanges i.e. 10 digits, the *Home Area Code* should be entered here. Any calls made with this area code will now be charged according to band 202.

When you select this option, the **V**iew-**A**dd-**D**elete-**S**earch menu pops up and the "total numbers of entries" currently in memory are displayed.

The entry is done in the same way as program #110. However, under this program, since all Area codes are of 3 digits only, the **A**dd-**D**elete-**S**earch options will proceed to the next step as soon as 3 digits are entered.

The calls are charged as per the table given below :

No. of digits in call	Call # starts with	7 digit LLD	10 digit local	1+10 digit local	Home area code	Condition	Call type	Band
7 to 9	2 to 9	No	X	X	X	X	Local	201
7 to 9	2 to 9	Yes	X	X	X	Exch. match	Local	201
7 to 9	2 to 9	Yes	X	X	X	No exch. match	LLD	202
7 to 9	1+	X	X	X	X	X	LLD	202
10+	2 to 9	X	No	No	No	No match with exch. or area code	Local	201
10+	2 to 9	X	Yes	X	X	Area code + exch. match	Local	203
10+	2 to 9	X	Yes	X	X	No. area code + exch. match, but first 3 digits match exch.	Local	201
10+	2 to 9	X	Yes	X	Yes	First 3 digits match entry in Home area code list	LLD	202
10+	2 to 9	X	X	X	X	First 3 digits match entry in area code list	LD	3xx
10+	2 to 9	X	Yes	X	X	No match	LLD	202
1 + 10	1	X	No	No	No	X	LD	3xx
1 + 10	1	X	X	Yes	X	Area code + exch. match	Local	203
1 + 10	1	X	X	Yes	No	No area code + exch. match	LD	3xx
1 + 10	1	X	X	Yes	Yes	No. area code + exch. match, but area code matches entry in Home area code list	LLD	202
1 + 10	1	X	X	Yes	Yes	No match	LD	3xx

Note: "X" means not applicable

All the above combinations may not be applicable at every site as the actual dialing pattern varies from site to site. Please check the actual patterns applicable at your site and program the unit accordingly.

If 7 digit local exchanges or the 10 digit / 1+10 digit area code + exchanges are applicable to your site, then all the valid combinations must be entered into the Call-A-Matic.

116 - PBX Dial Out Strings

The Call-A-Matic Plus and the Limited models support toll control of MITEL, ATLAS and TRANSTEL PBXs.The Call-A-Matic PMS Lite model does not support toll control.

Since this requires extensive programming keeping your specific PBX in mind as well as the actual wiring at your site, it is recommended that you see your dealer for set up instructions. Consult the dealer for further assistance. Additional details are provided at the end of this manual.

When you invoke this program number, the prompt **Enabled** or **Disabled** appears on the screen. Enable Toll control using the YES/NO keys.

The next screen allows to set the dialing speed of the modem in the unit. The Dialing speeds may be set in steps of 20 ms from a minimum of 70 ms to a maximum of 250 ms. Press the BLUE key to pop up the Help menu.

A value of **0** = **70 ms** and a value of **9** corresponds to **250 ms.** This value sets the duration of the tone bursts while dialing out to the PBX. Hence, **0** gives the fastest dialing speed, while **9** gives the slowest.

The following types of PBXs are supported for Toll Control. Consult your dealer for more information.

MITEL BASIC OPEN/CLOSE type
MITEL SX/20 Allow 1/Allow 2
MITEL SX/20 Allow 1/Allow 2/Allow3
MITEL SX50/MS3504/MS50
MITEL SX50/MS51/MS55
TELTRONICS 319 A
TELTRONICS 319 B
DEAN COMMUNICATIONS
MITEL SX200 LITE
ATLAS
TRANSTEL

Also, the next screen allows you to set the serial port parameters for sending the Toll Control strings to the PBX. Another screen allows you to choose between enabling and disabling ACK/NAK protocol.

117 - Default Credit Limit

User may set a default credit limit of $$ for all guests that are checked in automatically. Credit Limit has to be entered in 2 digits and only whole dollars.e.g. $1 = 01. Default = $ 05

A default limit of $ 99 will mean that unlimited credit limit is applied to all guestrooms, from which calls are made without being manually checked in first. Such rooms are not subject to Credit Violation checks.

118 - Key Pad Entry Options

This setting will determine how quickly the Call-A-Matic screen will time out to its main screen when no key is pressed during programming or when it is waiting for an input during report printing. Intervals are in blocks of 15 seconds. Since any number between 0 and 9 may be entered, the shortest time out period is 15 seconds & the maximum is 135 seconds.

Default = 9 = 135 seconds

The next screen allows you to set the **typing speed** for accepting entries from the keypad, by setting the keystroke de-bounce value.

If you set too low a value, you may not be able to enter the digits properly, as the unit may take multiple entries for a single key depression. Too large a value may make the entry process very slow and painful.

The Default value of **2** should be acceptable for almost all units.

119 - Administrative Extensions

Administrative extensions are exempt from toll control and the surcharge is not added to calls made from these extensions. These extensions are not checked in and during a Checkout report, these extensions are not included.

These extensions may be checked out - i.e. calls from these extensions will be removed from memory - during a "Night Audit report " or under the "Admin. Extension Report" under Audit reports.

The extensions may be entered in the same manner as for program number 110.

All the extensions entered here are subject to the "Pairing extension" check. Refer to "Program 121" for the further details.

If you try to manually check in an extension that has already been programmed as an Admin extension, a warning message **"cannot check in this extension as it is an Admin extension"** will be flashed on the screen. So also, if an extension is already checked in and now, if you program that extension as an Admin extension, it will be automatically removed from the list of checked in extensions. The charges for all calls made from that moment onwards would be charged as per the Admin extension rates. However, calls made prior to this, which were subject to charges applicable to a normal extension, will remain as they were.

If an Admin extension is deleted from the list of Admin extensions, it will be automatically checked-in with the default credit limit and would be subject to credit violation check from that moment onwards.

120 - DO NOT PRINT ON FLY for following bands

Some bands may be specified as " Don't print on fly " bands. For example, if the local calls need not be printed on the fly - since these constitute the bulk of the calls made from any property - then the band 201 (which is for Local calls) may be entered under this program.

These bands may be entered in the same way as for program 112.

121 - Extension Pairing

If one guest room is being provided with 2 phones with separate extension numbers and you want to treat them as one single extension, it is possible to do so, by programming them as paired extensions under this program.

It is permitted to pair a 3-digit extension with a 4-digit extension and vice versa as well as pairs of 3 digit and 4 digit extensions. It is also allowed to pair one *primary* extension to multiple extensions (no limit).

The entry procedure is same as that for program # 110, with some small variations relevant to pairing programming. When this program is invoked, the **V**iew-**A**dd-**D**elete-**S**earch menu pops up and the "total numbers of entries" currently in memory are displayed.

Under this program, all extensions are treated as 4 digit extensions hence, a 3-digit extension like 215 will be stored internally as 0215. However, you need not enter the leading zero. When you select **A**dd option, the **"Press BLUE key for range programming"** message is flashed. If the first key pressed at this stage is the BLUE key, the unit will take you to the range programming of extension pairs. Otherwise, a single extension pair may be added.

While adding the single pair, first enter the *secondary extension* (ex. 215). If you enter 4 digits, the unit will automatically prompt you with the next step. If you entered a 3 digit extension, press the ENTER key. Now, the "=" sign comes up and the *primary* extension (ex. 115) is to be entered. If this extension is of 3 digits, press ENTER to terminate the entry. The unit will return to the View-add-Delete-Search menu.

If RANGE programming is selected by pressing the BLUE key, the message **"first room # :"** is prompted. Enter the first *secondary* room number to be paired. As above, press ENTER to terminate if a 3-digit extension is entered. The **"="** is prompted. Type in the first *primary* extension. After this, the **"Last room #:"** is prompted. Type in the last *secondary* extension to be paired.

If the range programming was for

"first room : 215","= 115","last room : 250",

This would show up under "View" option as follows :

"0215 0115, 0216 0116,…… 0250 0150" indicating that the extension 215 is paired to 115, 216 is paired to 116 and so on, till 250 being paired to 150.

However, if an entry already exists for a secondary extension falling within the "first room last room" range, that particular pairing will be skipped. In the above example, if the entry **229 = 101** had already been made earlier, now while range programming, the entry **229 = 129** will be skipped (a secondary extension may be paired to only one primary extension). But an entry **358 = 129** will not be skipped, since extension 129 (primary extension) may be paired to more than one extension.

All extension entries under all other programs and during Check in or Check out are subject to the Extension pairing check.

Hence, if you Check in room number 216, the unit will convert it to 116 (since 216 is paired to 116). If a call is made from 216, it will be treated as having been made from 116. If you enter 216 as a don't-print-on-fly extension, it will convert it to 116.

Entries under program numbers 110, 111, 119 and 630 are subject to pairing check. If a secondary extension is entered under any of these programs, it will be converted to the primary extension.

Since it is possible to pair multiple secondary extensions to one primary extension, you may pair all admin extensions together and enter the primary extension in the admin extension list. Now all these extensions will be treated as Admin extensions. However, by doing it in this manner, it will not be possible to separate the calls made from each individual extension all calls from all these extensions will be shown as having been made from the primary extension only.

So also, it is not possible to check in a secondary extension. If you try to check in extension 216 (in the above example), it will accept the entry, but the print out will show that 116 was checked in.

122 - Beeper Control

The Beeper in the Call-A-Matic may be enabled or disabled through this program.

Default = enabled

If you disable the beeper, it will suppress the audible clicking of the key depressions, as well as all alarm beeps etc.

123 - Report Pagination

Under this program, the option to print all reports on a fresh page may be enabled or disabled.

Default = disabled

If enabled, a page feed character is sent to the printer before printing any report.

124 - PMS Integration

This program allows the Call-A-Matic to receive Check-in and Check-out strings from the PMS. However, this is a separate software module and needs to be factory-enabled. By default, this module is disabled. When enabled, rooms may be checked in or checked out on the Call-A-Matic from the host PMS screen itself.

This integration program will not be accessible even if factory enabled - if in Program # 116, MITEL LITE or ATLAS PBX is selected for Toll Control through serial port.

To use the PMS Integration feature, go into programming mode, run Program #124 and ENABLE PMS check in/out using the YES/NO key.

Select the correct PMS type **INNSOFT** or **MITEL LITE** using the YES/NO key**.**

Auto print Check out reports ?

YES/NO If you select YES, every time the PMS sends out a Checkout string to the Call-A-Matic, that room is checked out and the Check-out report is printed out automatically. If you select NO, the room will be checked out but the report will not be printed.

Purge Calls on Check out ?

YES/NO If you select YES, all the calls of that room will be automatically deleted and purged form the Call-A-Matic. You MUST NOT run an AUDIT report under this condition. If you select NO, the calls will be deleted but will not be purged form the Call-A-Matic hence an AUDIT report may be run later if desired.

Default Toll restriction Level

Enter the default Allow character that is to be used when Checking in a room automatically on receipt of Check-in string from the PMS. The room will be checked in with the default credit limit.

125 - PMS Formats

If the second serial port of the Call-A-Matic is being used to send the processed call records to the Property Management System installed on the property, then it may be necessary to send these records in a format specific to that PMS system.

This program may be used to reformat the processed call record to suit the PMS software. By default the PMS option is disabled. The following PMS Formats are available -

NGS 39 TEL
MICROS CAS
HOLIDEX
HOBIC
CHECK-INN
INN TEL HX
ENCORE HX
MARLBORO
BELL HOBIC
CHOICE
HILTON SYSTEM 21
USER DEFINED

The above formats are predefined and any one of them may be chosen.

If one or more of the fields need to be changed in any of the pre-defined ones, first select the desired format and complete the programming till the last screen. Then, go back into pgm# 125 and select **User defined** option. The screen will scroll up to show all the fields one by one. The fields that need to be entered are -

SEQUENCE NO	SSLL	(SS = starting column)
DATE	SSLL	(LL = field length)
TIME	SSLL	
DURATION	SSLL	
EXTENSION	SSLL	
CALLED.NO	SSLL	
TRUNK	SSLL	
ACC#	SSLL	
CHARGES	SSLL	
$	SS01	
HIC	SSLL	
CHG.TYPE	01 / 02 / 03 / 04	
DURN.TYPE	01 / 02 / 03	
DATE TYPE	01 / 02	
TIME TYPE	01 / 02 / 03	
CR/LF	01	
BCC	01	
HIC NAME	CAS_	

If SSLL= 00 00 i.e. the starting column and field length equal zero, it means that particular field is not used in the PMS format.

Charge type	1 = $$$.$$ (leading zeros blanked)	ex = $ _ _2.25
	2 = NNN.NN (leading zeros not blanked)	ex = $ 002.25
	3 = 1 d.p for cents only	ex = $ 002.2
	4 = in pennies	ex = $ 00225
Duration type	1 = hh:mm:ss	
	2 = mmm	
	3 = hh:mm	
Date type	1 = mm/dd	
	2 = mm/dd/yy	
Time type	1 = hh:mm:ss	
	2 = 11:45_PM	
	3 = 23:45	
CR/LF	0 = not required	
	1 = required	
BCC	0 = not required	
	1 = required	
HIC NAME	enter max. 4 characters for HOTEL ID. CODE NAME	

Note : There are quite a few parameters that are unique to a particular PMS format. Hence, it is not possible to define a completely new type of PMS format. The purpose of the User defined option is only to provide a means to juggle around the starting columns and field lengths etc.

After the PMS formats are defined, the following screens appear :

ACK/NAK handshake :

required (default)
not required

If the "ACK/NAK not required" option is selected, the next 2 screens will be skipped and the program would go to "Printer set up" screen.

If rejected by PMS :

Buffer calls and post when PMS ready
print error message

If ACK/NAK protocol has not been selected, this screen will not appear

Enter ENQ/STX/ETX/ACK/NAK characters (ex. 05 02 03 06 15) :

The above are the normal hex values for the handshake characters. In the unlikely event that a PMS uses some other values, these may be modified to match the host PMS.

PMS printer set up :

Serial = PMS, no parallel printer (default)
Serial = PMS, all non-pms data on parallel printer
Serial = PMS, all data on parallel printer
Serial = PMS, all data + pms debug data on parallel printer

While defining the Printer set up under the PMS program, it is assumed that the user would want only the PMS data to go out on the PMS port. Among the available options, the first one allows the user to disable the parallel printer port on the Call-A-Matic.

The second option sends all the data except the PMS record itself to the parallel printer.

The third option sends even the PMS record to the parallel printer. This is a troubleshooting aid, to be used when the host PMS is rejecting the records sent out by the Call-A-Matic. When this option is selected, the actual record sent to the host PMS is also sent out to the parallel printer. If, even with this option, it is not possible to find the reason for the records being rejected by the PMS, select the fourth option.

In the fourth option, in addition to the printable data, a description of each of the handshake characters & control characters is also sent out to the parallel printer. For example, it could be as given below –

ENQ =>	(Call-A-Matic sends ENQ to PMS)
<=NAK	(PMS sends back NAK)
ENQ =>	(Call-A-Matic sends ENQ to PMS)
<=NAK	(PMS sends back NAK)
ENQ =>	(Call-A-Matic sends ENQ to PMS)
<=ACK	(PMS sends back ACK)
STX =>	(Call-A-Matic sends STX to PMS)
PMS RECORD	(Call-A-Matic sends data record to PMS)
ETX =>	(Call-A-Matic sends ETX to PMS)
BCC =>	(Call-A-Matic sends BCC to PMS)
CR =>	(Call-A-Matic sends CR to PMS)
LF =>	(Call-A-Matic sends LF to PMS)
<= NAK	(PMS sends back NAK)

In case the PMS does not respond at all, you will only find three successive ENQs being sent by the Call-A-Matic to the PMS.

SMDR Records :

to be stored (default)
do not store

This screen pops up even if the PMS output is not selected. If the `do-not-store' option is selected, the calls are just charged and printed out. No calls are stored in the unit's memory.

126 - New Area Code Additions

New area codes may be added to the existing list of area codes already in the Call-A-Matic.

The entry procedure is same as that for program # 110. When this program is invoked, the **V**iew-**A**dd-**D**elete-**S**earch menu pops up and the "total numbers of entries" currently in memory are displayed.

Under this program, all entries are of 6 digits (3 digit new area code followed by 3 digit old area code). Hence, under this program, the **A**dd-**D**elete-**S**earch options will proceed to the next step as soon as 6 digits are entered.

To add a new area code, select the **A**dd option. The second line will show "Add:" now first enter the new are code - for example 334 in Alabama - enter 334205 - where 334 is the new area code and 205 is an existing area code of the same state. Once this is done, whenever a call is made to 334 area code, the charges and the state code will be taken from the area code 205.

When you select the **V**iew option, all the entries will be shown in a 6-digit format, where the first 3 digits correspond to the new area code being added and the last 3 digits correspond to an existing area code of the same state.

127 - Name of Property

This program is used to enter the name of the property into the Call-A-Matic. This name will appear on top of all the reports.

To enter the name of your property, all alphabets and digits have to be entered using the 2 digit decimal value of the ASCII code for that particular character. Valid character codes are from 32 to 99.

A maximum of 60 characters may be entered here (including spaces). It is recommended that the property name first be written down and translated into the ASCII character set from the list given below.

For example **ABC MOTEL**

=65 66 67 32 77 79 84 69 76

= A B C M O T E L

As you enter the two-digit ASCII code for each letter, you will see the letter displayed on the screen. Edit the entries by using left arrow key. To finish, press ENTER. The full name will be automatically centered across the full width of the printer line.

To make any corrections, you will have to re-enter the name fully.

32	Space	44	,	56	8	68	D	80	P	92	\
33	!	45	-	57	9	69	E	81	Q	93	]
34	"	46	.	58	:	70	F	82	R	94	^
35	#	47	/	59	;	71	G	83	S	95	_
36	$	48	0	60	<	72	H	84	T	96	`
37	%	49	1	61	=	73	I	85	U	97	a
38	&	50	2	62	>	74	J	86	V	98	b
39	'	51	3	63	?	75	K	87	W	99	c
40	(	52	4	64	@	76	L	88	X		
41	)	53	5	65	A	77	M	89	Y		
42	*	54	6	66	B	78	N	90	Z		
43	+	55	7	67	C	79	O	91	[		

128 - Caller-ID disable strings

All over USA, users have the option of withholding the calling number information from being sent to the recipient of the call. For this, Caller-Id disable strings are to be dialed before the actual number is dialed out.

These Caller-Id disable strings may contain a ✻ or the **#** character. **If the user does not program these strings in the Call-A-Matic and if a guest pre-fixes these disable digits and dials out, this call will be treated as a Non-call record.**

If these strings are entered and ***a call is made with these digits preceding the actual called number, the Call-A-Matic will automatically discard these leading digits and only the actual called number would appear on the printouts.*** By looking at the processed output record, there is no way to find out if the caller had used the Caller-Id disable strings or not.

The entry procedure is same as that for program # 110. When this program is invoked, the **V**iew-**A**dd-**D**elete-**S**earch menu pops up and the "total numbers of entries" currently in memory are displayed.

Under this program, entries may be a maximum of 5 digits. Hence, the **A**dd-**D**elete-**S**earch options will proceed to the next step as soon as 5 digits are entered. To enter a smaller string (ex. a 3-digit string), terminate by pressing the ENTER key.

Some typical disable strings are ***67** and **#68** etc.

129 - Valid Extension List (for CALL-A-MATIC LIMTED only)

This program is available only when the unit is factory set as CALL-A-MATIC LIMITED. The LIMITED unit will process calls only for those extensions, which are entered under this program. A maximum of 32 extensions may be entered. All calls made from any extension that is not programmed here will be ignored.

The entry procedure is same as that for program # 110. When this program is invoked, the **V**iew-**A**dd-**D**elete-**S**earch menu pops up and the "total numbers of entries" currently in memory are displayed.

130 PMS Test Program

This program is used as a testing and debugging tool to check the PMS interface in a property. Usually while interfacing the Call-a-Matic to the property's PMS, it is necessary to make calls with some charges from valid guest rooms. With the help of this program, dummy calls may be transmitted to the PMS to check if the system is posting the calls correctly, instead of having to actually climb a few floors, go to a guest room and make calls that will actually be charged to the property.

Enter room no. : RRRR
Enter duration (in minutes) : MM
Enter phone number : xxxxxxxxxxx

Enter a 3 or 4 digit room number, enter 2-digit duration in whole minutes and then enter any phone number upto a maximum of 11 digits. If any calls were processed after the unit was powered on, the details from the last call will be automatically prompted on screen. If no calls have been processed, all 0's will be displayed on screen. This call will be then processed as if it was received from the PBX through the SMDR port.

201 to 630 Charge Setting Programs

All the charge setting programs (except for Local calls) follow the pattern of "First minute charges", "Additional minute charges", "Surcharge" and "Markup %"

The charges for the total duration are first calculated, and then marked up and the surcharge added to this amount. If the call was made when discount rates are applicable, the discount % is deducted after marking up and the surcharge is added after that. Greater details may be found under Program # 113.

Default Markup % = 0

201 - Local Call Charges

The Local Calls may be charged on ` A fixed charge' basis or on a `Time block' basis, as desired by the user.

The system prompts you to enter the `Fixed surcharge' and then you may enter 2 different blocks each with its own time block of minutes and the charges for that block. If you want to charge a fixed surcharge only for all calls, enter 000000 for the first time block.

If you want to use only the first time block - e.g. if you want to charge 35 cents for every 3 minutes or part thereof, enter 030035 for the first time block - and enter 000000 for the second block.

If you want to charge 48 cents for the first 5 minutes and then 32 cents for every additional minute, enter 050048 for the first time block and 010032 for the second time block. Default = 0035, 000000, 000000

The total charges are marked up and then the Surcharge would be added over and above these time charges.

202 - Local Long distance calls -- 1 + 7 digit calls or calls to exchanges not listed in program # 115. Default = 0033, 0034, 0110

203 - Local 10 digit / 1+10 digit calls All calls made to the area code + exchange combinations listed under program # 115. Default = 0000 0000 0000

204 - Common charges for all 1+10 digit calls - to all states, common charges programmed in this band will be copied onto the charges for all state area code bands - 301 to 362. The markup % entered under this program # would be copied onto all bands 310 to 362.

Default charges

= 0035, 0034, 0155 (for 301 to 361).
= 0513, 0455, 0155 (for 362)

205 - Common charges for all INT calls -- common charges programmed in this band will be copied onto the charges for all individual bands 501 to 530. The markup % entered under this program # would be copied onto all bands 501 to 530.

Default = 0125, 0125, 0150.

206 - Information Calls -

Some central offices have 411, 1411, 5551212, 15551212 for instate information. This band may be programmed to charge accordingly. Default = 0100, 0000, 0000

207 - Undefined Area Code Band. These calls are to area codes not found in bands 301 to 362 and not entered under the `New area codes' under program 126. Default = 0035, 0034, 0155

208 - Undefined 011 INT calls - to countries not listed in bands 501 to 530. Default = 0350, 0275, 0155

209 - Information calls -- calls to 1-XXX-555-1212 or XXX-555-1212 numbers

Some central offices use the above pattern for out of state information calls. Charges may be set accordingly. Default = 0100 , 0000, 0000

210 - 1-700 calls

Some area codes, states, central offices have 1-700-XXX-XXX type of calls to bypass local carrier and go directly to the long distance carriers. Charges may be programmed to the typical charge setting program. Default = 0000, 0000, 0000

211 - 1- 800 Calls Default = 0000, 0000, 0000

Includes calls to 1-800, 1-888, 1-877 numbers and calls to these numbers dialed without a 1 in front of the number.

212 - 1- 900 Calls Default = 1000, 1000, 1000

213 - 976 Calls to Information Services Default = 1000, 1000, 1000

214 - 710 Calls to government Services Default = 0000, 0000, 0000

215 - 0+ operator assisted calls Default = 0000, 0000, 0000

216 - 01+ International Credit card calls Default = 0000, 0000, 0000

301 - 362 Individual area codes grouped according to states. Default charges

= 0035, 0034, 0155 (for 301 to 361)
= 0513, 0455, 0155 (for 362)

401 - 420 Prefixed state - nearby state group.

All the states in the US have been grouped into 21 groups. So, if you want to set your charges more accurately depending on the actual distance from your property to each of the other states, these bands could be used to shorten the programming time. The charges entered under these bands - e.g. 413 (which is for Texas, Oklahoma and New Mexico) - would be copied onto the respective bands for each of these three states. Details of the state groups are given at the end of this manual.

501 - 530 Prefixed international country code band. Each band is programmed as a typical group. List of countries, their codes and the charges are given at the end of this manual.

Default charges (from band 205) = 0350, 0275, 0155

601 - 630 User Defined Bands

601 - 608	USER DEFINED AREA CODES
609 - 616	USER DEFINED EXCHANGES
617 - 621	USER DEFINED COUNTRY CODES
622 - 625	USER DEFINED SPECIFIC NUMBERS
626	USER DEFINED WARNING NUMBERS
627	USER DEFINED WARNING EXCHANGES
628	USER DEFINED WARNING BANDS
629	USER DEFINED WARNING AREA CODES
630	USER DEFINED WARNING EXTENSIONS

For each of these User defined bands, the entry program is same as in program # 110.

The number of digits that need to be entered, during **A**dd or **D**elete or **S**earch, for each of the UDF bands, will depend on the type of entry being made. For example, 3 digits must be entered for Area codes, exchanges and bands. Extensions may be of variable lengths, but will be stored as 4 digit numbers. The country codes may be of variable lengths (maximum 5 digits). When entering less than the maximum number of digits, press ENTER key to end the entry.

For bands 622 to 626 - specific / warning numbers, the numbers of digits may be a minimum of 1 to a maximum of 14. For example, for band 622, if you entered "1203" and "01191794543555", all Long distance calls to area code 203 would be charged as per band 622 and all calls to the specific number 01191794543555 would be charged as per band 622.

When a call record is being checked for called-number matches in the Specific number User defined bands, all digits of an entry in the UDF band must match with as many digits of the called number. It does not matter if the called number has more digits than the entry in the UDF band. Hence, if you just enter "1" in the UDF band 622, all calls which have 1 as their first digit will be taken as matched under band 622.

The Emergency number 911 is programmed into band number 626 for warning numbers during power-up default programming.

For each of these UDF bands, charges may be entered for them and a corresponding grace period may also be entered. Default charges for all these bands = 0000, 0000, 0000. The Default grace period for all these bands = 20 seconds.

After the charges are entered, the markup % will need to be entered. The default markup is 0%.

800 Parameter Dump

Under this program, a copy of all the parameters, charges etc. set in the system may be printed out and kept for record purposes.

Supervisory Programs

999 - Set factory defaults: Loads factory default settings for all charges and program parameters, clears all previous calls and checked in rooms from memory.

998 - Load all default charges : Only the default charges are re-loaded

996 - Clear property name : Erase the name of the property

992 - Delete all entries for 110-112, 115, 119, 120, 121, 126, 128, 6xx programs: All entries made under above programs (all those that use the View-Add-Delete-Search format) are deleted.

991 - Delete all calls and room numbers: All the calls are deleted, Admin extensions (like console stations etc.) and checked in rooms are erased from memory, and call sequence number is reset to 0001.

980 - Save program parameters in non-volatile memory: All the program parameters used for calculating charges and print and store routines are kept in the working memory of the unit. This working memory may get corrupted during power outages or due to a bad mains plug or socket. Hence, it is advisable to save a copy of these program parameters in the unit's non-volatile memory. In case of a memory corruption, the saved parameters may be reloaded. So also, it is important that you run this program every time you make any changes to the program parameters.

If the left arrow key is used at any time during programming, the system will automatically prompt to save the parameters in Non-volatile memory before exiting from the programming mode.

970 - Restore program parameters from non-volatile memory: To reload saved parameters from non-volatile memory into working memory. When this program is run, the unit reloads all parameters from the Non volatile memory into the working memory area and then will reset and restart.

Management Reports (MGMT REPORT key)

Enter Password: (4-digit password)

1. Audit Report
2. Current Call Report
3. Credit Violation Report
4. Wake up Call Report

With a 4-digit password, only the 4 reports shown above are accessible.

With a 5-digit password, all the 9 reports are accessible to the user.

Enter Report # between 1 and 9 for desired report.

1. Audit Report
2. Checked Out Guest Report
3. Credit Violation Report
4. Clear Monthly Trunk Totals
5. Print Monthly Trunk totals
6. Administration extension reports
7. Calls in memory
8. Wake up calls report
9. Print and purge buffered PMS calls

Description of Reports

1. Audit Report

This report does the following:

1. Prints the summary records for all rooms Checked-out since last report
2. Prints the ADMIN Call report
3. Prints the PROFIT AND LOSS report for these Checked out calls and Admin Calls

After the report is printed out, a message prompt to 'erase' them from memory would appear. If the option were 'yes', only then these summary records and the Admin calls would be removed from the memory.

2. Checked Out Report

Normally in a hotel, the desk clerk checks out a guest and deletes the calls from the memory. However, in the Call-A-Matic, a summary of these calls will be retained in memory. The supervisor can get a print out of all these checked-out-guest-summary records in the memory under the Audit reports. These records would be printed out in the order in which the rooms were checked out.

This report forms the first part of the AUDIT report shown below.

AUDIT REPORT FROM Mar 04 98 23:07 TO Mar 04 98 23:27
SUMMARY REPORT
CHECKED OUT GUEST CALLS

```
***EXT   100 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT   102 HAD   2 CALLS WITH A TOTAL OF $     21.16 CHECKED OUT 03/04 23:24
***EXT   132 HAD   1 CALLS WITH A TOTAL OF $      1.01 CHECKED OUT 03/04 23:24
***EXT   202 HAD   1 CALLS WITH A TOTAL OF $      1.01 CHECKED OUT 03/04 23:24
***EXT   451 HAD   1 CALLS WITH A TOTAL OF $      1.94 CHECKED OUT 03/04 23:24
***EXT   452 HAD   1 CALLS WITH A TOTAL OF $     70.46 CHECKED OUT 03/04 23:24
***EXT   453 HAD   1 CALLS WITH A TOTAL OF $     69.80 CHECKED OUT 03/04 23:24
***EXT   465 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT   466 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT   467 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT 1004 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT 1450 HAD   1 CALLS WITH A TOTAL OF $      0.86 CHECKED OUT 03/04 23:24
***EXT 1454 HAD   1 CALLS WITH A TOTAL OF $      2.65 CHECKED OUT 03/04 23:24
***EXT 1455 HAD   1 CALLS WITH A TOTAL OF $      2.65 CHECKED OUT 03/04 23:24
***EXT 1457 HAD   1 CALLS WITH A TOTAL OF $      0.86 CHECKED OUT 03/04 23:24
***EXT 1458 HAD   1 CALLS WITH A TOTAL OF $      0.86 CHECKED OUT 03/04 23:24
***EXT 1459 HAD   1 CALLS WITH A TOTAL OF $      0.86 CHECKED OUT 03/04 23:24
***EXT 1473 HAD   1 CALLS WITH A TOTAL OF $      0.86 CHECKED OUT 03/04 23:24
***EXT 2787 HAD   1 CALLS WITH A TOTAL OF $     18.63 CHECKED OUT 03/04 23:24
***EXT 3788 HAD   1 CALLS WITH A TOTAL OF $     10.28 CHECKED OUT 03/04 23:24
***EXT 4002 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT 4503 HAD   1 CALLS WITH A TOTAL OF $      1.94 CHECKED OUT 03/04 23:24
***EXT 4544 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT 4789 HAD   1 CALLS WITH A TOTAL OF $      2.65 CHECKED OUT 03/04 23:24
***EXT 5003 HAD   1 CALLS WITH A TOTAL OF $      7.88 CHECKED OUT 03/04 23:24
***EXT 5751 HAD   1 CALLS WITH A TOTAL OF $      2.86 CHECKED OUT 03/04 23:24
***EXT 5752 HAD   1 CALLS WITH A TOTAL OF $      1.29 CHECKED OUT 03/04 23:24
***EXT 7754 HAD   1 CALLS WITH A TOTAL OF $     10.28 CHECKED OUT 03/04 23:24

******  28 CHECKED OUT ROOMS      TOTAL CHARGES $   285.95 ******
```

PROFIT AND LOSS FOR THIS PERIOD

	CALLS	COST	BILLED	PROFIT
LOCAL CALLS	8	$ 17.05	$ 47.95	$ 30.90
LONG DISTANCE CALLS	10	$ 25.94	$ 84.20	$58.26
OPERATOR CALLS	0	$ 0.00	$ 0.00	$ 0.00
INTERNATIONAL CALLS	2	$ 50.63	$ 140.26	$ 89.63
OTHER CALLS	9	$ 4.90	$ 13.54	$ 8.64
TOTALS	29	$ 98.52	$ 285.95	$187.43

PROFIT = 65.54 %

ADMIN. CALL REPORT

```
***EXT  1463 HAD   1 CALLS WITH A TOTAL OF $    8.74
***EXT  1456 HAD   1 CALLS WITH A TOTAL OF $    1.00
***EXT  AT01HAD   1 CALLS WITH A TOTAL OF $    0.60
***EXT  AT02HAD   1 CALLS WITH A TOTAL OF $    2.39

******  4 ADMIN CALLS    TOTAL COST $     12.73 ******
```

3. Credit Violation Report

This report prints all the rooms with credit violations.

CREDIT VIOLATION REPORT
Mar 04 98 23:22

EXTN	CALLS	CR.LIMIT	CURRENT CHARGES	VIOLATION	ALLOW
100	1	$ 5	$ 7.88	$ 2.88	4
102	2	$ 5	$ 21.16	$ 16.16	
452	1	$ 5	$ 70.46	$ 65.46	
453	1	$ 5	$ 69.80	$ 64.80	0
465	1	$ 5	$ 7.88	$ 2.88	
466	1	$ 5	$ 7.88	$ 2.88	
467	1	$ 5	$ 7.88	$ 2.88	
1004	1	$ 5	$ 7.88	$ 2.88	2
2787	1	$ 5	$ 18.63	$ 13.63	1
3788	1	$ 5	$ 10.28	$ 5.28	
4002	1	$ 5	$ 7.88	$ 2.88	
4544	1	$ 5	$ 7.88	$ 2.88	
5003	1	$ 5	$ 7.88	$ 2.88	
7754	1	$ 5	$ 10.28	$ 5.28	

*** 14 CREDIT VIOLATIONS. CALLS 15 CURRENT CHG $ 263.65 VIOLATION $ 193.65

In the above report, the ALLOW column appears only if TOLL CONTROL is enabled and the rooms are manually checked in with some credit limit.

4. Clear Monthly Trunk Totals **:**Clears monthly totals.

5. Print Monthly Trunk Totals

The total charges of all calls made - separately for Local calls (201), Local LD calls (202), Long distance calls (301-361, 207), Information calls, International calls (501-530, 208) and User defined band calls - are maintained in the memory. These totals will be of use in ascertaining the traffic on all the lines and lead to better management of the CO lines.

6. Administrative Report

This report will print a report for all the calls made from the administrative extensions. The option to PRINT ONLY or PRINT AND CLEAR is prompted before the report is run.

This report is the same as the last part of the AUDIT report and maybe printed out in Detail or Summary format.

7. Total Calls in Memory

The total number of the calls in memory, number of rooms checked in and the number of deleted call records in memory - would be displayed on the LCD and also printed out along with the current date and time.

8. Print and purge Wake up calls

This option is valid only for MITEL PBXs and if the "Store Wake up calls" option has been enabled under program no. 108.

When invoked, this program will print out all the Wake up calls and clear the memory of all these records.

Wed Mar 04 98 23:14:04 Stored WAKE UP CALLS print out

132 10/17 10:30 WU 10:30 BUSY 1
138 10/17 10:30 WU 10:30 ANSWERED
104 10/17 10:30 WU 10:30 NO ANSWER 1
212 10/17 10:30 WU 10:30 NO ANSWER 1
144 10/17 10:30 WU 10:30 ANSWERED
140 10/17 10:30 WU 10:30 NO ANSWER 1
245 10/17 10:30 WU 10:30 ANSWERED
237 10/17 10:30 WU 10:30 ANSWERED
143 10/17 10:31 WU 10:30 NO ANSWER 1
132 10/17 10:35 WU 10:30 ANSWERED
104 10/17 10:35 WU 10:30 NO ANSWER 2
143 10/17 10:36 WU 10:30 ANSWERED
235 10/17 10:36 WU 10:30 ANSWERED
142 10/17 10:36 WU 10:30 NO ANSWER 2
104 10/17 10:40 WU 10:30 ANSWERED
200 10/17 10:40 WU 10:30 NO ANSWER 3 *****

Printed and cleared

9. Print and purge buffered PMS calls

This report is applicable only when PMS has been enabled and calls are being buffered when the PMS system stops posting the calls.

In such cases, run this program to print all the buffered calls and clear the memory of these records.

Room Audit Reports (ROOM AUDIT key)

The following reports are available under this key.

1. Audit Report
2. Current Call Report
3. Credit Violation Report
4. Wake up call Report

Option (1) AUDIT REPORT needs a password to be invoked. The other reports may be run without having to enter a password.

Reports (1), (3) and (4) are the same as the corresponding reports available when a 5-digit password is used. Report (2) is given below

CURRENT CHECKED IN ROOM REPORT
Mar 04 98 23:22

EXTN	CALLS	CHARGES	CR.LIMIT	VIOLATION	ALLOW
100	1	$ 7.88	$ 5	OVER $ 2.88***	4
102	2	$ 21.16	$ 5	OVER $ 16.16***	
132	1	$ 1.01	$ 5	UNDER $ 3.99	
202	1	$ 1.01	$ 5	UNDER $ 3.99	
451	1	$ 1.94	$ 5	UNDER $ 3.06	
452	1	$ 70.46	$ 5	OVER $ 65.46***	
453	1	$ 69.80	$ 5	OVER $ 64.80***	0
465	1	$ 7.88	$ 5	OVER $ 2.88***	
466	1	$ 7.88	$ 5	OVER $ 2.88***	
467	1	$ 7.88	$ 5	OVER $ 2.88***	
1004	1	$ 7.88	$ 5	OVER $ 2.88***	2
1450	1	$ 0.86	$ 5	UNDER $ 4.14	
1454	1	$ 2.65	$ 5	UNDER $ 2.35	
1455	1	$ 2.65	$ 5	UNDER $ 2.35	
1457	1	$ 0.86	$ 5	UNDER $ 4.14	
1458	1	$ 0.86	$ 5	UNDER $ 4.14	
1459	1	$ 0.86	$ 5	UNDER $ 4.14	
1473	1	$ 0.86	$ 5	UNDER $ 4.14	
2787	1	$ 18.63	$ 5	OVER $ 13.63***	1
3788	1	$ 10.28	$ 5	OVER $ 5.28***	
4002	1	$ 7.88	$ 5	OVER $ 2.88***	
4503	1	$ 1.94	$ 5	UNDER $ 3.06	
4544	1	$ 7.88	$ 5	OVER $ 2.88***	
4789	1	$ 2.65	$ 5	UNDER $ 2.35	
5003	1	$ 7.88	$ 5	OVER $ 2.88***	
5751	1	$ 2.86	$ 5	UNDER $ 2.14	
5752	1	$ 1.29	$ 5	UNDER $ 3.71	
7754	1	$ 10.28	$ 5	OVER $ 5.28***	

28 CHECKED IN ROOMS. TOTAL CHARGES $ 285.95 CR.VIOLATIONS $ 193.65 ROOMS 14

In the above report, the ALLOW column appears only if TOLL CONTROL is enabled and the rooms are manually checked in with some credit limit.

Error Messages

Whenever an error or a wrong operation takes place, the system prompts with an error message. The list of these error messages and their explanations are given below:

< Sorry no further help or help not available press [ENTER] >

This message appears whenever you press the BLUE key but there is no help message for that program or when you scroll through the available help messages till the end. Press [ENTER] key to return to your original message prompt.

< No such program number .... >

This message appears under the 'parameter-programming mode', whenever you enter a program number, which does not exist. Press [ENTER] to return to normal operation.

< Illegal Password >

This message appears whenever a non-existent password is used to enter the programming mode or the 'Audit reports'. Press [ENTER] return to normal processing

< Access Denied >

This message appears whenever a 4-digit password is used to gain access to the parameter programming, since only 5 or 6 digit password users have access to these programs.

<No free memory to store any more room nos. Check out some rooms first>

The system has a separately allocated memory area to store all the checked in room numbers . Normally, a maximum of 256 room numbers may be stored along with their credit limits and total accumulated charges. However, if this number is exceeded, new rooms cannot be stored without deleting some rooms under the 'Check-out' report.

However, the calls will get stored for these new room numbers even if you do not delete any rooms to free the memory space. But these calls and these room numbers will not appear in the Audit report and Checked-In room report but will appear in all the other reports and the extension report with the 'all' option.

The next few messages given below should not appear during normal mode of operation. If they do appear, this would be suggestive of a malfunction or some memory corruption due to voltage fluctuation etc. It is advisable to check all other parameters also if any of these messages appear due to any reason. Also make a note of any special conditions that may have triggered this fault occurrence and notify the supplier if this occurs frequently.

< Warning memory banks deleted or added - run program # 991 or 999 >

This error message will appear only when some hardware changes have been made - like adding or removing memory banks.

< Warning serial port parameters corrupted. Default values set >
< Warning SMDR config string corrupted default values set >

This message appears, normally when the unit is powered on after a long period of disuse, if the serial port parameters or the SMDR parameters are corrupted.

The parameters stored in the EEPROM are downloaded into normal memory and the serial port & SMDR are programmed accordingly.

< Warning memory corrupted. Full ram is being cleared >

This message will appear when the system is first powered on after a long period of disuse - like when the system is first installed at a site etc.

Sometimes, when there are frequent power failures for brief periods, there is a very small chance that the power on/off surges on the mains line may corrupt the memory. But for such severe fluctuations, the normal power failures should not affect the system memory.

If such a memory corruption takes place, all the calls stored earlier will be lost. However, all the program parameters, charges etc. will be restored from the non-volatile memory.

Important Notes

a. Printer Messages

This system puts out a short message on the first line of the display, indicating the status of the printer attached to the unit. These messages are 'PRN ONLN', 'PRN OFLN', and `PRN OFF', depending on the printer status.

The message would show PRN OFF when the printer is connected but is powered off. All print routines will go through when PRN ONLN and PRN OFF. So, if you just need to see the totals on the LCD, but do not want to print the report, power off the printer and run the report.

But with printer connected and powered on, if the printer is off line or if there is no paper, it will show PRN OFLN and the print routines will not go through.

If the printer goes out of paper while printing a report, 'PRINTER NOT READY' message appears on the last line. If you want to discontinue the printing, press [EXIT] key till the system returns to normal mode of operation.

b. Battery Back-up

The Call-A-Matic system comes with a built in NiMH rechargeable battery, which is kept on a constant trickle charge when the system is powered on. When the system is first unpacked, this battery may be fully run-down and you may get the 'Memory Corruption' message. However, once installed, this system is expected to be kept permanently powered on and hence the battery will get fully charged in a day or two and the data retention during normal power failures would be taken care of. A fully charged battery should provide a back up for a month at least.

c. Wiring Precautions

The unit is supplied with a wall mounting 9 Volts AC transformer with a 2-pin jack, which will plug in directly into the Call-A-Matic.

FOR SAFE & RELIABLE OPERATION, THIS UNIT MUST BE GROUNDED PROPERLY.

d. PBX not connected

The unit constantly checks for the PBX connection. If it is not connected or if the connection becomes loose, the unit will sound a warning beep and also print a message on the printer saying, "PBX NOT CONNECTED". The beep and the message will keep occurring once every minute, till the problem is rectified.

Toll Control Programming for MITEL PBXes

Program 116. Dial out required

IMPORTANT:- Before this feature is enabled the installer must ensure that the test line is connected to the Call-A-Matic unit and that it has been enabled from the telephone system.

MITEL SX 20

Port 01 is the test line. Switch 6 on the CPU card must be enabled together with switch 8.

MITEL SX 50

Select an unused port and program it for test line operation in command 100. Register 1 bits E,F,G. Switch 1 and 2 on control card must also be enabled.

Before connecting the test line to a Call-A-Matic ensure that line is working by connecting a regular 2500 telephone to the test line and try a few attendant functions, e.g. *22 rm no 0. This should open that room's line. Now decide which type of toll restriction is to be used, type A or type B.

Type A: open/close line through MSG reg key. The programming for MITEL SX 10/20/50 is the same in the Call a Matic. Refer to Toll control type A on the following pages.

Type B: Allow 1,2,3. For different levels of toll restriction refer to the specific programming for that type of phone system in the following pages.

For **SX 20** installer must program phone system so that:-

Command 911 has allow 1 restrictions

Command 921 has allow 2 restrictions

Toll allowed becomes allow 3 restrictions

Program COS 9 to have no trunk group access in command 619 reg 1. Whenever a room exceeds the credit limit or is checked out its COS will be changed to COS 9.

For **SX 50** you must program ARS so that

RCS 1 has Allow 1 restrictions

RCS 2 has Allow 2 restrictions

RCS 3 has Allow 3 restrictions

When a room exceeds its credit limit the Call-A-Matic will automatically restrict that rooms line to Allow 1.

Type A - Open close line for MITEL SX 10/20/50

Go into programming mode. At program No. prompt press 116. Select the **ENABLED** option by pressing YES or NO key

The next screen allows you to set the dialing speed. No changes are necessary to this screen. Press ENTER key.

The screen will now show the type of phone system that has been selected. By default, it will be MITEL BASIC OPEN/CLOSE type.

If any other type is displayed, press the left or right arrow key repeatedly, till the above is displayed. Press the ENTER key.

Press EXIT key to return to main screen.

Now whenever someone is checked in/out or if an extension exceeds its credit limit the Call a Matic will respectively either open /close the line for the required extension through the MSG reg function without any operator intervention.

TYPE B - SX20/50 ALLOW 1/2/3

(1 TRUNK GROUP)

Go to program 116. Select the **ENABLED** option by pressing YES or NO key.

The next screen allows you to set the dialing speed. No changes are necessary to this screen. Press ENTER key.

The screen will now show the type of phone system that has been selected. By default, it will be MITEL BASIC OPEN/CLOSE type.

Press the left or right arrow key repeatedly, till the desired system is displayed. Press the ENTER key.

MITEL SX20 ALLOW 1 / ALLOW 2	(1trunk group)
MITEL SX20 ALLOW 1 / ALLOW 2 / ALLOW 3	(2 trunks)
MITEL SX50/MS3504/MS50	
MITEL SX50/MS51/MS55	

Screen shows

MITEL SX…			# entries = 0000
View	**A**dd	**D**elete	**S**earch

Select "Add" option by pressing the left or right arrow keys till the blinking cursor is on the Add option and then press the YES key. To do RANGE programming, press the BLUE key at this point. The prompt would now be

First port no. :
Last port No. :
First room no. :
Class of service :

In the above prompts, enter a 2-digit port number for SX20 (Port numbers are in the range 01 to72) and a 3-digit port number for SX50 (Port numbers are in the range of 001 to 160). Enter a 3-digit room number. The class of service digit is required for SX20 only.

If you want to add a single entry manually, type in the 2 digit equipment no, 1 digit COS no followed by 3 digit room no.

For SX20:	**01 1 100**	(01= Port no 1=Cos no 100=Room no)
For SX50:	**001 100**	(001= Port no 100=Room no)

For SX50/100/200: Equipment numbers are in the range 001 to 160. Therefore for cct. number 16 in slot 302 you would have an equipment number of 032.

Please note that for MITEL SX 20 port no is two digits in length, room no is three digits in length, COS no is one digit in length. For MITEL SX 50 port no is three digits in length room no is three digits in length

Type C Allow 1,2,3 for MITEL SX 100/200 Teltronics 319

Installer must first program the generic 319 to have the following attributes for this feature to work.

1) Enable option 409 (allow ext. to change COS)

2) Assign access code to feature 58 (allow Ext. to change COS)

3) Setup COS values 11, 12, 13 for the following call restrictions

   COS 11 should be restrictions to be assigned to Allow 1 (i.e. free calls 0 & 1800)

   COS 12 should be restrictions to be assigned to Allow 2 (i.e. Above plus local)

   COS 13 should be restrictions to be assigned to Allow 3 (i.e. All calls)

4) Program one extension, which is to be connected to Call-A-Matic to have feature 58 allowed in its COS. Before connecting this line to Call-A-Matic try dialing out the feature 58 from a regular 2500 set to verify that line can indeed change the COS of a room.

5) Connect Line to Call-A-Matic

Select Program 116 to ENABLE dial out. (default is DISABLED)

Leave the next screen at default value of 1 (Dialing speed)

Select Phone system type to TELTRONICS 319 or DEAN COMMUNICATIONS - the difference between the two is that for Teltronics system, a guest room's line will be restricted to Allow 1, when it is either checked out or if that room exceeds its credit limit.

For MITEL Dean system, a guest room's line will be restricted to Allow 2 when it is either checked out or if it exceeds its credit limit.

Type D - Connecting the Call-A-Matic to the SX200 EL/ ML through a Data Set

1. Enter programming mode on the Call-A-Matic (Press * Followed by the Enter Key) Use the default password 12345 and then press the ENTER Key. Enter 116 as the program number when prompted to "Enter Program number" in the Call-A-Matic.

2. Program the parameters for SX200.

(a) ENABLE Toll control (press YES / NO key till the display shows ENABLE)

(b) Set the dialing speed = 1

(c) Select the phone type = MITEL SX200 LITE (press the NO key until the screen displays MITEL SX200 LITE)

(d) Choose the Baud rate and Communication specifications (change any field by pressing NO and to select any field press YES or ENTER. Select ACK/ NAK required.

(e) The next screen prompts you to select SX200 TYPE A or TYPE B. If the Type A option is chosen, when there is a Credit violation for a Guest room, the Call-A-Matic dials out the Check Out String to the PBX (this prevents the Guest making any more calls and also clears the Wake up calls set for that room). In the Type B option, in the above case, the Check In string is dialed out (this brings the room phone to the default restriction level and retains the Wake up calls set for that room).

3. Programming the SX200 LITE.

(a) Select the COS number

(b) Form 04 System options : Program the Following

System options/ Timers	**Status**
35. Property Management System	ENABLE
27. Room Status Audit	DISABLE
33. Room Status	DISABLE

(c) Enable the following COS options

901 – DTRX Herald.
904 – DTRX Complete Message Text.
906 – Data SMDR does not apply.

(d) Form 29 DTE Profile

—Select a DTE profile number. You will use this profile number in Form 12–Data Assignment
—Select the SEL option Subform
—Enable the DTRX Echoplex, Editing and edit Character = 127

(e) Form 11 Data Circuit Descriptor

—Select a Circuit Descriptor (CDN). You will use this CDN in form 12 in the Next step.

Option Name	**Value**
Session inactivity timer	0
Guard timer	2
Minimum Baud Rate	MATCH CALL-A-MATIC
Default Baud Rate	MATCH CALL-A-MATIC
Maximum Baud Rate	MATCH CALL-A-MATIC
Always use Default Baud rate	Yes
DTR off Disconnect timer	5
DTR to CTS Delay timer	100
DTR Forced High	YES
RTS Forced High	YES
DSR is held high when device idle	YES
Originate a DTRX call with Low high transition of DTR	NO
Action taken if the Idle DTE has DTR low (Auto answer)	Refuse
ASYNC: Keyboard origination allowed	DISABLE
ASYNC: ADL auto Baud	DISABLE
ASYNC : Flow control	XON/ XOFF
ASYNC : Parity	MATCH CALL-A-MATIC
ASYNC: Character length	MATCH CALL-A-MATIC
ASYNC: Number of Stop Bits	MATCH CALL-A-MATIC
DS2100: operating mode	ASYNCHRONOUS

(f) Form 12 Data Assignment

- Select an available PLID and program the selected Dataset. In the Data terminal Equipment profile (DTE) field enter the DTE number you used in Form 29. Use the same CDN you used in form 11.

(g) Form 34, Directed I/O program the PMS

Ext Num	Print Out	Print out Type	Guaranteed
From Form 12	PMS	Autoprint	NO

Quick Set Up Guide

STEP 1: Introduction to Programming:

To enter the programming mode:-

Press [✱] [ENTER]

Press [1] [2] [3] [4] [5] [ENTER]

By entering a program number the system will prompt you through the programming of the desired option.

Notes:-

The [←] key is used to edit any options on screen.

A [+] sign in the top right hand corner means help is available for this program #.

Press [MGMT REPORT] and help instructions will appear on screen.

STEP 2: INITIALIZING THE UNIT

Press [✱] [ENTER] Enter Password, then [ENTER]

Enter [9] [9] [9] [ENTER]

STEP 3: DETERMINING THE BAUD RATE OF THE SMDR

If the system is set for:

1200	BAUD	(For the MITEL SX20, Command 601 Register 7
8	Data Bits	should read 7080810.)
1	Stop Bit	
	No Parity	(For MITEL SX100/200 Check Switch on Scanner
		(ORANGE) card to check if 300,1200 Baud.)

then no further action is required and you may continue to Step 5 otherwise: -

STEP 4 :

Press [✱] [ENTER]

Enter Password. Press

Press [1] [0] [2] [ENTER]

Screen shows:-

1200 8 bits No-parity 1-stop

YES	NO	←	→

Use these keys to edit the displayed setting to those of your installation.

If the settings of the phone system match the Call-A-Matic then any valid call in excess of 1 minute should now print on the printer. If not, the Call-A-Matic BAUD rate does not match that of the phone system and you should try another setting in program 102.

STEP 5: Determining Dialing Pattern for Local Long Distance Calls

a. 7 digits
b. 1 + 7 digits
c. 1 + area code and 7 digits
d. 10 digit locals
e. Home area code calls are local long distance

Default in the system is b.

For areas in the United States where 7 digits may be local and in-state long distance, you must enter all the local exchanges into the system. This information is usually found in the front section of the white pages of your local phone book.

Go to program 115.
Enable **Local Long distance** option.
Select Add option
Add **Local exchanges**

Press **EXIT** after last entry.

For areas where bordering towns in adjacent states may be local calling, but dialing is **10 digit**, you will have to enter all these area code + exchange combinations.

Go to Program 115

Enable **10-digit local calls** option

Select Add option

Enter area code + exchanges of all local numbers of bordering states.

Press **EXIT** after last entry.

For areas where bordering towns in adjacent states may be local calling, but dialing is **1+10 digit**, you will have to enter all these area code + exchange combinations.

Go to Program 115
Enable **1+10 digit local calls** option
Select Add option
Enter area code + exchanges of all local numbers of bordering states.

Press **EXIT** after last entry.

For areas where all calls within the home Area Code are to be dialed with the Area code + Exchange and are treated as Local Long Distance calls:

Go to Program 115
Enable **Home area code** option
Select Add option
Add **Home area code**

Press **EXIT** after last entry.

STEP 6 : Local Call Charging

Go to Program no. 201

Enter fixed surcharge. For example **0 0 3 5**

Enter First block time and charges. For example **03 0055**

Enter Second block time and charges. For example **05 0045**

If you want to charge only a fixed rate for all local calls (however long), then enter 0's for first and second blocks.

If you want to charge calls only on one block type of charging - for example to charge $ 00.55 for every 3 minutes - enter first block as shown above and all 0's for second block.

If you want to charge $ 00.55 for first 3 minutes and then charge $ 00.45 for every additional 5 minutes of the call, enter second block as shown in above example.

If you do not want to add the surcharge of $ 00.35, enter all 0's for surcharge.

Call•A•Matic Software Version 3.00

1. **Call charging style changed**
2. **PMS operation and reports re-defined**
3. **Program Nos. 401 to 421 removed**

Call charging style for all bands made as per the `first block minutes-charges, second block minutes-charges, surcharge' style (as for Local calls in band 201). Hence, now, 10 digit local calls and 1+10 digit local calls (band 203) may be charged like 201 band calls. All default charges will now have the value "01" in the first block and second block minutes fields. For example, band 304 had 0034, 0033, and 0155 earlier for first minute, additional minute and surcharge. Now it would have 010034, 010033, and 0155

The new charging style is applicable to all bands 201-216, 301-362, 501-530, and 601-630.

Program #204 will copy the common charges for bands 301 to 351 only. The charges for bands 352 to 362 must be changed individually.

Band 601 is now "User Defined Local Area code" band and 622 is "User Defined Local numbers" band. Calls to Band 203, 601 and 622 will be tagged as Local calls (with an `L') for PMS outputs.

Calls to AREA CODES programmed in Band 601 will be treated as Local calls. The charges and grace periods programmed for that band would apply to these calls.

Program #125 PMS Definition

1. When any of the PMS type is selected, the Callamatic prompts with the message **"Load default parameters? YES/ENTER or NO".** When the PMS type is defined for the first time, press YES or ENTER to load the default parameters for that PMS type.

2. Next the Callamatic prompts with the message **"Edit PMS parameters? YES/ENTER or NO"**. Press YES or ENTER to change the desired parameters. If you press NO, the system will skip to the next part of the program. If you change the default parameters, take care not to LOAD DEFAULT parameters when you go back into program #125 press NO at the prompt and complete the rest of the program options.

3. If a PMS option is enabled, it will automatically set the `Store NO charge calls ?' option to "NO" under program #105.

4. If the `No parallel printer' option is selected under the printer set up in program #125, then program #105 will be bypassed. If you enter 105 at the "Enter program no." prompt, you will be asked to set the options under program #125. If the Parallel printer is selected under program #125, the print-on-fly options may be set under Program #105.

PMS operation (wherever PMS is enabled)

1. Toll control and credit violation check will be done only for manually checked in rooms. If calls are made from rooms that are not manually checked in, these rooms will be automatically set up with unlimited credit limit.

2. If the PMS rejects a call, it will be tagged as Unposted. You may select the "PRINT ERROR MESSAGE" or "DO NOT PRINT ERROR MESSAGE" option as desired under program #125.

3. The Callamatic attempts to post the first unposted call a maximum of 5 times once every time a new call comes in. During each attempt, the Callamatic tries 3 times consecutively to post the

same call. If the call is still rejected by the PMS after 5 attempts, an error message is printed out (if enabled) and will skip this call during the next attempt at posting previously Unposted calls. These calls must be posted manually on the PMS.

4. In the PMS Audit report, the Unposted calls will be marked with an asterisk at the end of the call record.

5. If ACK/NAK is not required, all calls will be treated as posted calls.

6. If TOLL CONTROL is also enabled, the Callamatic will dial out to open and close the extension during a manual CHECK-IN or CHECK-OUT ONLY. During the PMS AUDIT report, the room lines are not affected, as there is no DIAL OUT.

Credit Limit Adjustment

The PMS Audit report features **Credit Limit Adjustment** for the manually Checked-in rooms. However, the Credit Limit is always maintained in whole Dollars only.

For example if Room #401 was manually checked in with a credit limit of $ 6.00 to start with and had made calls worth $ 1.10 when the Audit report was run, this will adjust to a balance credit of $ 5.00, balance charges of $ 0.10. and will appear as

EXTN	CR. LIMIT	CHARGES	BALANCE	ADJ. CREDIT	ADJ. CHARGES
401	**$ 06**	**$ 1.10**	**UNDER $ 4.90**	**$ 05**	**$ 0.10**

At the time of the next report, if some more calls had been made from that room - for example, if the total call charges now were $ 2.10, it would appear as

EXTN	CR. LIMIT	CHARGES	BALANCE	ADJ. CREDIT	ADJ. CHARGES
401	**$ 05**	**$ 2.10**	**UNDER $ 2.90**	**$ 03**	**$ 0.20**

Note that the balance charges of $ 0.10 (from the first report) were added to the $ 2.10 of the second report to get an adjusted balance of $ 0.20 to be carried over from this to the next report.

The user must keep track of the balance charges from the previous report. The `Charges' and `Balance' columns in this report reflect the figures from the calls made during the period corresponding to this report only.

If a manually checked in room has exceeded the Credit Limits, at the time of Credit-Limit adjustment during the PMS Audit report, the Adjusted Credit and the Balance charges are both set to $ 0.00. For example -

EXTN	CR. LIMIT	CHARGES	BALANCE	ADJ. CREDIT	ADJ. CHARGES
401	**$ 04**	**$ 8.21**	**OVER $ 4.21**	**$ 00**	**$ 0.00**

Management Reports

Whenever PMS is enabled, the following reports are available to the user

Under ROOM AUDIT KEY (no password)

1. Unposted Guest call report
2. Posted Guest call report
3. Checked in guest report

Under MANAGEMENT REPORT key (under password only)

1. Audit report
2. Unposted Guest call report
3. Posted Guest call report
4. Admin. Call report
5. Checked in guest report
6. Wake-up call report
7. Calls in memory

The **Audit** report under PMS may be printed out in Detail or Summary format and does the following

a) If a guestroom was manually checked in, the credit limit will be adjusted and the room would remain checked in.

b) If the guestroom was not manually checked in, the room would be checked out and deleted from the list of auto-checked in rooms.

c) The Guest report is printed out (in detail or summary) for all rooms that had charged calls since the last time the report was done.

d) The Checked in room list after adjustment of credit limits is printed out

e) Admin. extension report is printed out giving all the Admin. calls extension-wise (in detail or summary) and all these calls are deleted.

f) The PROFIT AND LOSS report (including the Admin.calls) is printed out.

g) The Posted Guest call report (in detail or summary) is printed out.

h) The Unposted Guest call report (in detail or summary) is printed out. If the report is being printed out in detail, the last column against each record would indicate the number of times the call was tried to be posted to the PMS.

At the end of the report, the Callamatic gives a special beep and asks to confirm whether calls are to be permanently purged from system memory or not. If the YES or ENTER key is pressed in response to this question, all the calls are permanently erased from memory. If the NO key is pressed, these calls will remain in memory and would be included in the next AUDIT REPORT.

The AUTO NIGHT AUDIT REPORT (Program #109) allows the user to set the Summary/Detail and Purge/Print only options.The Auto audit report is identical to the manual Audit report.

Room Report When a detailed report for a particular room is required, you may print calls made from that room between a particular starting date and time to an ending date and time.

To invoke this report, press the ROOM REPORT key, select the desired option from `Detail on printer' or `Show summary on screen' or `Summary on printer' options by pressing the YES / NO keys.

Enter the room number at the "Room No.:" prompt. Pressing the BLUE key at this point will not pop up the "ALL EXTN" option the "All Extn" option is available only under a non-PMS operation. However, under a non-PMS option, this report is not available.

Once the room number is entered, the next prompt is

"From Date & Time (MMDDhhmm) : ????????"

"To Date & Time (MMDDhhmm) : ????????"

Use the ← key to erase the desired number of question marks and enter the starting /ending date and time and press **ENTER**

This will now give only those calls that were made between these timings (both times included)

To print all calls for that room irrespective of when they were made just hit "Enter" at both the prompts.

AREA CODE LIST

Band State	Area codes	code
301 - MAINE	207	ME
302 - NEW HAMPSHIRE	603	NH
303 - VERMONT	802	VT
304 - CONNECTICUT	203,860,959,475	CT
305 - NEW YORK	516,212,718,914,518,315,607, 716,917,631,347,646,845,585	NY
306 - NEW JERSEY	609,908,201,732,973 ,856,551,848,862	NJ
307 - RHODE ISLAND	401	RI
308 - MARYLAND	410,301,240,443,227,667	MD
309 - PENNSYLVANIA	215,717,814,412,610,724,267,484,570 878,445,835	PA
310 - VIRGINIA	703,804,540,757,571,434,276	VA
311 - SOUTH CAROLINA	803,864,843	SC
312 - NORTH CAROLINA	919,704,910,828,336,252,980	NC
313 - FLORIDA	904,813,407,305,941, 954,352, 561,850,863,321,727,786,754,386,772	FL
314 - GEORGIA	404,912,706,770 678,470,478,229	GA
315 - WEST VIRGINIA	304	WV
316 - OHIO	614,216,419,513,330,440,937,740, 567,234,283	OH
317 - ILLINOIS	618,217,309,815,312,708,630, 847,773,224,331,464,872	IL
318 - MICHIGAN	313,517,616,906, 810,248,734, 231,947,679,278,989,586	MI
319 - INDIANA	812,317,219,765,260,574	IN
320 - KANSAS	316,913,785,620	KS
321 - DELAWARE	302	DE
322 - ALABAMA	205,334,256,251	AL
323 - TENNESSEE	615,901,423,931,865,731	TN
324 - KENTUCKY	502,606,859,270	KY
325 - MISSISSIPPI	601,228,662	MS
326 - WISCONSIN	715,608,414,920,262	WS
327 - LOUISIANA	504,318,337,225,985	LA
328 - ARKANSAS	501,870,479	AR
329 - MISSOURI	417,816,314,573,660,975,636,557	MO
330 - IOWA	319,515,712,641,563	IA
331 - MINNESOTA	218,612,507,320,651,952,763	MN
332 - TEXAS	214,512,409,915,806,817,903, 713,210,281,972,254,830,940,956, 361,469,832,979,936,737,682	TX
333 - OKLAHOMA	405,918,580	OK
334 - NEBRASKA	402,308	NE
335 - SOUTH DAKOTA	605	SD
336 - NORTH DAKOTA	701	ND
337 - MONTANA	406	MT
338 - WYOMING	307	WY
339 - COLORADO	303,719,970,720	CO
340 - NEW MEXICO	505	NM
341 - ARIZONA	602,520,928,480,623	AZ
342 - UTAH	801,435,385	UT

343 - IDAHO	208	ID
344 - WASHINGTON	206,509,360,253,425,564	WA
345 - OREGON	503,541,971	OR
346 - NEVADA	702,775	NV
347 - CALIFORNIA	619,707,916,415,909,408,209,805, 213,714,310,510,562,530,650,760, 925,831,626,323,559,818,949,951, 341,764,752,657, 628,424,661,669, 858,935,627,369,442,747	CA
348 - ALASKA	907	AK
349 - HAWAII	808	HI
350 - MASSACHUSETTS	413,617,508,978,781,339,351,774,857	MA
351 - WASHINGTON D.C.	202	DC
352 WEST INDIAN IS.		PR
	BERMUDA 441	
	PUERTO RICO 787	
	CARIBBEAN IS. 809	
	BAHAMAS 242	
	BARBADOS 246	
	ANGUILLA 264	
	ANTIGUA 268	
	BR.VIRGIN IS. 284	
	CAYMAN IS. 345	
	GRENADA 473	
	MONTSERRAT 664	
	DOMINICA 767	
	ST.LUCIA 758	
	ST.VINCENT 784	
	TRINIDAD 868	
	ST.KITTS 869	
	JAMAICA 876	
	US VIRGIN IS. 340	
	TURKS & CAICOS 649	
	PUERTO RICO 939	
353 - MANITOBA	204	MB
354 - SASKATCHEWAN	306	SK
355 - ALBERTA, YUKON, NW TERRITORY	403,867,780	AB
356 - ONTARIO	807,416,519,613, 705,905,647,289	ON
357 - QUEBEC	418,514,819,450,438	QB
358 - NEW BRUNSWICK	506	NB
359 - BRITISH COLUMBIA	604,250,778	BC
360 - NEW FOUNDLAND	709	NF
361 - NOVA SCOTIA	902	NS
362 - CNM Islands, GUAM	671,670	GU

PREFIXED STATE GROUPS

401 GROUP 1 - NEW HAMPSHIRE, MAINE, VERMONT
402 GROUP 2 - CONNECTICUT, NEW YORK, NJ, RHODE ISLAND
403 GROUP 3 - PENNSYLVANIA, WEST VIRGINIA, VIRGINIA
404 GROUP 4 - SOUTH CAROLINA, NORTH CAROLINA
405 GROUP 6 - MISSISSIPPI
406 GROUP 7 - OHIO, ILLINOIS, WISCONSIN, MICHIGAN
407 GROUP 8 - TENNESSEE, INDIANA, KENTUCKY
408 GROUP 9 - DELAWARE, MARYLAND, WASHINGTON DC
409 GROUP 11- LOUISIANA, ARKANSAS
410 GROUP 12- MISSOURI, IOWA
411 GROUP 13- MINNESOTA, SOUTH DAKOTA
412 GROUP 14- KANSAS, NEBRASKA, COLORADO
413 GROUP 15- TEXAS, OKLAHOMA, NEW MEXICO
414 GROUP 16- MONTANA, WYOMING, IDAHO
415 GROUP 17- WASHINGTON, OREGON
416 GROUP 18- ARIZONA, UTAH, NEVADA
417 GROUP 20- ALASKA, HAWAII, PUERTO RICO
418 GROUP 21- ALBERTA, NW TERR, YUKON, SASKATCHEWAN
419 GROUP 22- MANITOBA, ONTARIO
420 GROUP 24- NEWFOUNDLAND, NEW BRUNSWICK
421 GROUP 25- MEXICO, MEXICO CITY

Note: These bands have been removed in Software version 3.00 and above.

INTERNATIONAL COUNTRY CODE BANDS

#	Zone	Country	Code	Charges
501	Zone 1	VENEZUELA	58	0125,0125,0150
502	Zone 2	U.K.	44	0125,0125,0150
503	Zone 3	ARUBA	297	0125,0125,0150
		ST.PIERRE	508	
		NE ANTILLES	599	
504	Zone 4	HONDURAS	504	0125,0125,0150
		PANAMA	507	
505	Zone 5	BELIZE	501	0125,0125,0150
		GUATEMALA	502	
		EL SALVADOR	503	
		NICARAGUA	505	
		COSTA RICA	506	
506	Zone 6	HAITI	509	0125,0125,0150
		GUADELOUPE	590	
		FR ANTILLES	596	
		GUANTANAMO	5399	
507	Zone 7	SOUTH AFRICA	27	0125,0125,0150
		NIGERIA	234	
		NAMIBIA	264	
508	Zone 8	NETHERLANDS	31	0125,0125,0150
		BELGIUM	32	
		FRANCE	33	
		SPAIN	34	
		ITALY	39	
		SWITZERLAND	41	
		AUSTRIA	43	
		DENMARK	45	
		SWEDEN	46	
		NORWAY	47	
		FRG GERMANY	49	
		FAEROE-IS.	298	
509	Zone 9	IRELAND	353	0125,0125,0150
510	Zone 10	PERU	51	0125,0125,0150
		ARGENTINA	54	
		BRAZIL	55	
		CHILE	56	
		COLOMBIA	57	
		BOLIVIA	591	
		ECUADOR	593	
		FR GUYANA	594	
		PARAGUAY	595	
		SURINAME	597	
		URUGUAY	598	
		FALKLAND IS.	500	
511	Zone 11	GREECE	30	0125,0125,0150
		GIBRALTAR	350	
		LUXEMBOURG	352	
		FINLAND	358	

512	Zone 12	HUNGARY	36	0125,0125,0150
		GDR	37	
		YUGOSLAVIA	381	
		ROMANIA	40	
		CZECHOSLOVAKIA	42	
		POLAND	48	
		TURKEY	90	
		GREENLAND	299	
		PORTUGAL	351	
		ICELAND	354	
		MALTA	356	
		CYPRUS	357	
		BULGARIA	359	
		BOSNIA	3871	
		CROATIA	385	
		ALBANIA	355	
		SLOVENIA	3866	
513	Zone 13	KUWAIT	965	0125,0125,0150
		SAUDI-ARABIA	966	
		UAE	971	
514	Zone 14	GUYANA	592	0125,0125,0150
515	Zone 15	MOROCCO	212	0125,0125,0150
		LIBYA	218	
		LIBERIA	231	
		CAMEROON	237	
		UGANDA	256	
		GABON	241	
		TANZANIA	255	
		LESOTHO	266	
		ZIMBABWE	263	
		ZAMBIA	260	
		SWAZILAND	268	
		ANGOLA	244	
516	Zone 16	EGYPT	20	0125,0125,0150
		ALGERIA	213	
		TUNISIA	216	
		GAMBIA	220	
		SENEGAL	221	
		IVORY-COAST	225	
		TOGO	228	
		BELIZE	229	
		ZAIRE	243	
		ASCENSION-IS.	247	
		KENYA	254	
		MALAWI	265	
		BOTSWANA	267	
517	Zone 17	IRAN	98	0125,0125,0150
		JORDAN	962	
		YEMEN	967	
		OMAN	968	
		ISRAEL	972	
		BAHRAIN	973	
		QATAR	974	

518	Zone 18	AUSTRALIA	61	0125,0125,0150
		SINGAPORE	65	
		JAPAN	81	
		HONGKONG	852	
519	Zone 19	ETHIOPIA	251	0125,0125,0150
		SOMALIA	252	
520	Zone 20	NEW ZEALAND	64	0125,0125,0150
		SAIPAN	670	
		AMERICAN SAMOA	684	
		GUAM	671	
		PAPUA NEW GUINEA	675	
		FR POLYNESIA	689	
521	Zone 21	MALAYSIA	60	0125,0125,0150
		INDONESIA	62	
		PHILIPPINES	63	
		THAILAND	66	
		KOREA	82	
		BRUNEI	673	
		FIJI	679	
		N CALEDONIA	687	
		MICRONESIA	691	
		MARSHALL-IS	692	
		MACAO	853	
		TAIWAN	886	
		BURMA	95	
		VIETNAM	84	
		NORTH KOREA	850	
		LAO PDR	856	
522	Zone 22	MEXICO	52	0125,0125,0150
523	Zone 23	NIGER	227	0125,0125,0150
		CAPE VERDE	238	
		GHANA	233	
		GUINEA	224	
		ARMENIA	7885	
		AZERBAIZAN	7892	
		BYELORUSSIA	7017	
		ESTONIA	7014	
		GEORGIA	7873	
		TADJIKISTAN	7337	
		TURKMENISTAN	7363	
		UKRAINE	70044	
		UZBEKISTAN	7371	
524	Zone 24	CHINA	86	0125,0125,0150
525	Zone 25	PAKISTAN	92	0125,0125,0150
		SRI LANKA	94	
		BANGLADESH	880	
		NEPAL	977	
		TONGA	676	
		W SAMOA	685	
		BHUTAN	975	
526	Zone 26	INDIA	91	0125,0125,0150
		MALDIVES	960	
		MAURITIUS	230	

		REUNION-IS.	262	
		RWANDA	250	
		SEYCHELLES	248	
527	Zone 27	BURKINA-FASO	226	0125,0125,0150
		DIJBOUTI	253	
		SIERRA-LEONE	232	
		BURUNDI	252	
		CEN.AFRICAN.REP	236	
		CHAD	235	
		COMOROS	269	
		CONGO	242	
		DIEGO GARCIA	246	
		EQ. GUINEA	240	
		GUINEA BISSAU	245	
		MADAGASCAR	261	
		MOZAMBIQUE	258	
		SUDAN	249	
528	Zone 28	IRAQ	964	0125,0125,0150
		YEMEN	969	
		SYRIA	963	
		LEBANON	961	
529	Zone 29	KIRIBATI	686	0125,0125,0150
530	Zone 30	MALI	223	0125,0125,0150

Warranty Summary

Call•A•Matic

(Call Accounting System)

EZ Advantage Corp. warrants this product to be free from manufacturing defects in material and workmanship under normal use and conditions for a period of one year from date of original purchase in the United States of America.

If the product proves defective for any reason due to manufacturing defect within the Warranty period, EZ Advantage Corp. will either repair the unit or replace it with a reconditioned unit,free of cost—provided the defective unit is sent to us for repairs.

The warranty does not cover replacement of parts damaged due to misuse, accident, improper operating voltages or any fault not attributable to manufacturing defect. The warranty shall also become void if an attempt is made to alter or repair the unit during the warranty period.

EXCEPT AS PROVIDED IN THIS SUMMARY OR THE APPLICABLE WARRANTY STATEMENT, EZ ADVANTAGE CORP. MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL **EZ ADVANTAGE CORP.** BE LIABLE FOR LOSS, DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OF THIS PRODUCT.

FCC Information:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Our Other Products

EZ Hold

EZ Announcer

EZ Answer

EZ Voice

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